

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1882.—Vol. XLI.

LONDON, SATURDAY, SEPTEMBER 16, 1871.

(WITH SUPPLEMENT) (PRICE FIVEPENCE. PER ANNUM, BY POST, £1 4s)

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(ESTABLISHED 1842.)

HOLDERS of mining shares DIFFICULT OF SALE in the open market may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

CASTLE AN DINAS TIN MINE (LIMITED).
This mine (St. Columb, Cornwall) is now in full work, and making regular profits. A minimum dividend of 10 per cent. is guaranteed for three years, from January, 1871, but the profits are expected to give a much higher return. The shares are limited to £2 each, and FULLY PAID, so there is no liability whatever. Mr. CROFTS strongly recommends these shares, in which he has SPECIAL BUSINESS.

Business in GREAT ROYALTON and ROCHE CONSOLS.
Every description of shares bought and sold at NET prices.
Bankers: Metropolitan Bank.

MR. W. H. BUMPUS, STOCK AND SHAREDEALER,
41, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—

10 East Lovell, £12½.	10 Roman Grav., £19½.
15 Ashton, £4 18s. 9d.	25 Sweetland Ck., £3 18s. 9d.
15 Anglo-Austral., fully paid, 17s. 6d.	5 St. John del Rey, £3½.
50 Bog, £2½.	10 South Aurora, £3½.
20 Broudford, £2 8s. 9d.	15 So. Condurrow, £9 18s. 9d.
30 Birdseye Creek, £4.	10 So. Rom. Grav., 2s. 6d.
50 Caegynon, 2s. 6d.	15 Tankerville, £16½.
100 Chontales, £2 fully paid, £2½.	50 Taquari, 8s. 6d.
100 Carb. Brea, £14s.	10 Utah, £17½.
20 Drake Walls, 17s.	50 W. Pant-y-go, 14s.
20 Don Pedro, £3 14s.	5 W. Chiverton, £18½.
2 Devon Ct. Consols.	20 W. Tankerville, £3½.
15 East Caradon, £5 1s. 3d.	25 Wheel Agar, 32s.
75 Kellipse, 21s. 6d.	10 Wh. Greenville, £17½.
5 Eberhardt, £38.	50 West Maria, 18s. 6d.
50 East Llangynog, £3.	45 Wheel Arthur, 31s.

W. H. B. transacts business in every description of shares at the best market prices, and free of commission.
Bankers: National Provincial Bank of England, E.C.

MR. Y. CHRISTIAN, STOCK AND SHAREDEALER,
11, ROYAL EXCHANGE, E.C.
Bankers: Bank of England.

MR. WILLIAM SEWARD, STOCK AND MINING SHAREBROKER,
19, THROMMORTON STREET, LONDON, E.C.
Every description of shares BOUGHT and SOLD at the best market prices.

MR. C. POWELL, STOCK AND SHAREDEALER,
78, OLD BROAD STREET, LONDON, E.C.

MR. THOMAS SPARGO, MINING ENGINEER, STOCK AND SHAREDEALER,
224 AND 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

MR. THOMAS THOMPSON, JUN., STOCK AND SHAREDEALER AND MINE AGENT,
5, WHITEHALL, LONDON, S.W.

Some valuable hints as to the purchase of mining shares will be found in Mr. THOMPSON'S "Investment Circular" for September; now ready; post free, price 6d.

Twenty-six Years' Experience.
MR. F. W. MANSELL, STOCK AND SHAREDEALER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.
Daily closing prices in British and Foreign mines every evening (free).
References exchanged. Bankers: London Joint-Stock Bank.

MESSRS. WM. MARLBOROUGH AND CO.,
29, BISHOPSGATE STREET WITHIN, LONDON, E.C. (Established 17 years), have FOR SALE the FOLLOWING SHARES at prices annexed:—

21 Anglo-Argen., 16s. 9d.	100 Florence and Tonkin, 6s. 9d.	6 Caerphilly Col., 30s.
40 Almaden, 20s. 9d.	60 Gwydyr Park, 18s. 9d.	30 Penllyn, £5½.
10 Ashton, £4½.	20 Gr. No. Lacey, 18s.	10 Old Batholow, 30s.
10 Anglo-Braz., 8s. 9d. dis.	40 Great Lovell, 21s.	5 Roman Grav., £18½.
40 Bog, £2½.	20 Great Western, 31s.	20 Rosewall Hill, 21s.
50 Birdseye Creek, £4 1s.	5 Great Lacey, £16 18s. 9d.	10 So. Darren, 21s.
20 Broudford, £2½.	3 Herodsfoot, £4½.	10 So. Condurrow, £10.
30 Bwch Consols, 25s.	40 Lovell, 5s.	75 So. Rom. Grav., 21s. 9d.
40 Cathedral.	10 Marke Valley, £5 16s. 3d.	30 South Aurora, £3½.
10 Carb. Brea, £144.	40 Llanidloes Wh. Van, 18s.	30 Sweetland, £3 18s. 9d.
3 Cook's Kitchen, £31½.	25 New Hington.	30 Tankerville, £6s. 9d.
20 Calbeck Fells, 25s.	25 New Lovell, £2 6s. 9d.	10 Tankerville, £16.
20 Drake Walls, 15s.	3 North Pool, £2½.	10 Utah, £17½.
1 Dolcoath, £13½.	25 North Croft, 30s. 6d.	2 Van, £5½.
20 Don Pedro, £2 18s. 9d.	20 Nanglies, 21s.	5 Van Consols, 26s.
5 East Llangynog, £12½.	30 Pennerley, £4 1s. 3d.	40 Wheel Agar, 30s. 6d.
1 East Pool, £13½.	60 Prince of Wales, 17s.	10 W. Chiverton, £17½.
20 East Van, £12 10s.	30 Powell United.	30 Wheel Lucy, £3 8s. 9d.
25 E. Greenville, £3 3s. 9d.	60 Pinto, £½ pm.	40 Wheel Creb, 24s.
10 Kellipse, 1s. 6d. prem.	40 Parys Mount, £3.	20 W. Drake Walls, 34s. 9d.
5 Eberhardt, £37 8s. 9d.	20 Pacific, £5 6s. 9d.	2 Wheel Jane, £11½.
10 Great Vor, £9 17s. 6d.	30 Perkins Beach, 31s.	20 W. Tankerville, £3½.
100 Excelsior, 4s.	5 Providence, £24½.	
30 Frank Mills, 21s.		

W. M. and Co. have business in East Llangynog, Wheel Ury, Thornhill Reef, Sierra Buttes, and Terras Tin shares, at close dealing prices.
Utah and South Condurrow shares strongly recommended for a speedy rise.

WHAT PAYS BEST?—A PRACTICAL TREATISE UPON INVESTMENTS IN BRITISH AND FOREIGN MINES.

W. MARLBOROUGH AND CO.,
29, Bishopsgate-street Within, London.
Post free Sixpence.

MR. HENRY MANSELL, STOCK AND SHAREDEALER,
34, GREAT WINCHESTER STREET, LONDON, E.C.

AN OFFER WANTED for the following shares (or any part of same):—
10 East Caradon, £1 18s. 9d. 100 East Llangynog.
50 So. Roman Gravels. 3 Cook's Kitchen, £31½.
25 Bog, £2½. 40 Rhydtalog.
40 Wheel Creb. 30 New Beldon. 70 Gwydyr Park, 17s. 6d.
15 Pennerley, £4. 50 Drake Walls, 14s. 15 Taquari, 7s.
40 West Jewell. 30 Wheel Lucy, £3 10s. 60 So. Herodsfoot, offer wanted.
10 North Croft. 30 Russian Copper, £7½ fully paid.
10 Great Royaltan. 10 Sweetland Ck., £3 18s. 9d.
10 W. Tankerville, £3 16s. 3d. 5 Tankerville, £16½.
50 Terras Tin. 50 Great Lovell, offer w. 30 Perkins Beach.
100 East Llangynog LEAD MINING COMPANY (Limited).—Mr. HENRY MANSELL strongly recommends the immediate purchase of these shares for a great advance in price. A detailed report on application; and specimens of the ore just brought from the mine can be seen at the above address.
GREAT VOR, SOUTH CONDURROW, and WEST CARADON shares are also safe to buy at present quotations.
References exchanged.
Daily List of Latest Prices sent free on application.

MR. GEORGE BUDGE, STOCK AND SHAREDEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 31 years), is a SELLER at net prices of:—

10 Wheel Kitty (St. Agnes), 8s. St. Agnes Consols, 3 Minera, 7s. West Caradon, 1s. 10s. Great Consols, 150 Wheel Creb, 26s. West Caradon, 7s. Wheel Lucy, 15s. Prince of Wales, 100 East Chiverton, 3 East Darren, 25 Pennerley, 80 Nanglies, 30 Providence, 20 West Jewell, 10 East Caradon, 25 Frank Mills, 50 East Llangynog, 25 Drake Walls, 10 Parys Mountain, 5 Roman Gravels, 5 West Chiverton, 5 East Greenville, 20 Wheel Greenville, 5 Great Retallack, 200 Wheel Arthur, 20 Caegynon, 100 New Beldon, 2 West Frances, 10 Rose and Chiverton, 3 Herodsfoot, 200 Anglo-Brazillian, 16 Utah, 120 Genera Brazilian, 100 Eclipse, 50 Birdseye Creek.
SPECIAL BUSINESS in Minera, Eberhardt, Trevarrack, Poldice, Cock's Kitchen, New Lovell, and New Pembroke.

WEST CARADON MINE.—Particulars of the recent discoveries at this mine will be found in PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST," No. 652, of Friday, Sept. 15, 1871. Price 6d. each, forwarded on application.

MR. PETER WATSON, STOCK AND SHAREDEALER,
79, OLD BROAD STREET, LONDON, E.C.
Bankers: The Alliance Bank, and Union Bank of London.

TANKERVILLE—ROMAN GRAVELS.—PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST," No. 652, of Friday, Sept. 15, contains the latest particulars of the above, and also of the LEADING COPPER and TIN MINES OF CORNWALL.

WEEKLY MINING CIRCULAR, EVERY FRIDAY.—LONDON DAILY RECORD, STOCK & SHARE LIST, Every Evening. Published by P. WATSON, Stock and Sharedealer, 79, Old Broad-street, E.C.

MR. W. H. CUELLO,
No. 42, CORNHILL, LONDON, E.C.
Daily price-list on application.

MR. E. J. BARTLETT, STOCK AND SHAREDEALER,
No. 30, GREAT ST. HELEN'S, LONDON, E.C., transacts business at net prices in every description of security.

MESSRS. W. DUNN AND CO., STOCK AND SHAREDEALERS,
3 AND 4, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.
Bankers: National Provincial Bank of England.

FOR SALE, at prices affixed:—
10 Anglo-Argen., 15 per cent. pref., 18s. 5 Eberhardt & Aurora, 40 So. Roman Gravels, £1 2s. 6d.
25 Bog, £2 10s. 50 Great No. Lacey, 19s. 5 Tankerville, £16½.
10 Broudford, £2 7s. 6d. 20 Gwydyr Park, £1. 25 Terras, £24½.
10 Brynambor, fully paid, 2s. 6d. 30 New Lovell, £2 5s. 5 Utah, £17.
25 Cashwell, ex div., £3 25 No. Tankerville, £11. 20 West Regair Ld., £2.
25 Caegynon, £1 10s. 19 Penhalls, £14½. 3 West Chiverton, £19.
20 Cefu Consols, £5 fully paid, £14½. 30 Perkins Beach, £11 12s. 6d. 25 West Jewell, £1 17s. 6d.
25 Drake Walls, 17s. 25 Rhydtalog, £1 12s. 6d. 10 Wheel Agar, £1 11s. 3d.
5 East Bassett, £6½. 5 Sierra Buttes, £4½. 10 Wh. Greenville, £3 17s. 6d.
10 East Llangynog, 10 So. Aurora, £3 7s. 6d. 5 Wheel Kitty (St. Agnes), £10.
5 East Lovell, £12 5s. 10 So. Condurrow, £19. 20 Wheel Lucy, £3 5s.
W. D. and Co. have orders in East Llangynog shares at close prices.

EDWARD BREWIS AND CO.,
18 AND 19, BISHOPSGATE STREET WITHIN, CITY, LONDON, E.C.

Mr. BREWIS begs to draw attention to the prospectus of EAST BOTTLE HILL MINING COMPANY (Limited) in last week's Mining Journal. The main lode will soon be cut, and shares rise 300 per cent.
Bankers: Alliance Bank (Limited), Bartholomew-lane, E.C.

MR. JAMES STOCKER, STOCK AND SHAREDEALER,
2, CROWN COURT, THREADNEEDLE STREET.
Bankers: London and Westminster (Established Twenty Years).

SILK AND CO., STOCK AND SHARE BROKERS,
32, REGENT STREET, PICCADILLY, W.
FRANK LIMMER, Secretary.

WHEEL GRENVILLE, EAST WHEEL GRENVILLE,
Treleigh Wood, West Caradon, Wheel Lucy, New Rosewarne, and Wheel Creb Mines specially recommended. Wheel Greenville shares, in all probability, will be worth £20 each; East Grenvilles, £10; Treleigh Woods, £150; West Caradons, £7; Wheel Lucy, £20; New Rosewarne, £150; and Wheel Creb, £5.
Mr. JOHN RISLEY (SWORN) STOCK AND SHARE BROKER,
77, CORNHILL, LONDON, E.C.

MR. W. TREGELLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., IS PREPARED TO DEAL in all descriptions of STOCKS and SHARES at close market prices.
W. T. strongly recommends for investment the shares of the ECLIPSE GOLD MINING COMPANY, which will soon be in a condition to make large returns of gold and silver.

W. T. also recommends the purchase of shares at once in NEW WHEAL CHARLOTTE TIN AND COPPER MINE COMPANY (Limited), St. Agnes, Cornwall, full particulars of which can be had on application.
Bankers: Imperial Bank.

HOOKE AND CO., STOCK AND SHAREDEALERS,
LIFE, FIRE, AND MARINE INSURANCE AGENTS,
2, UNION COURT, OLD BROAD STREET.

At the rate of One Guinea per annum, we give investors information on legitimate mining properties in the United Kingdom.

FOR SALE—EAST LLANGYNOG and TERRAS shares at lowest market prices.

ECLIPSE—TAQUARI.—The former should be sold; the latter bought, which the "knowing ones" are doing, and early action should be adopted.

H. B. RYE, Stock and Sharebroker, 77, Old Broad-street, E.C.

MR. ALFRED JONES, STOCK AND SHAREDEALER,
182, CITY ROAD, LONDON, E.C.

MR. JONES has the following SHARES FOR SALE, cash or account:—
150 Anglo-Brazillian, 7s. 2 Eberhardt, £8. 70 Gwydyr Park, 18s. 6d.
20 Broudford, £23½. 100 Eclipse, £8. 30 Port Phillip, 16s.
50 Caegynon, £13½. 10 East Lovell, £12. 80 Rosa Grande, 7s. 6d.
20 Drake Walls, 17s. 6d. 20 East Van, £12½. 40 South Aurora, £3½.
WANTED TO BUY—100 East Bottle Hill shares, at £6 per share, cash.

MESSRS. J. HUME AND CO., 74, OLD BROAD STREET, LONDON, E.C.

FOR SALE—
10 Utah, £17½. 20 Kansas, £4 prem. 20 W. Tankerville, £4.
10 Eberhardt. 50 Taquari, 6s. 9d. 10 Tankerville, £16½.
20 South Aurora. 30 Don Pedro. 10 Pennerley, £14½.
20 Richmond Cons., £4 10 Great Vor. 25 Birdseye Creek, £4½.
prem. 10 So. Condurrow, £9½. 20 Bog, £2½.
10 Carb. Brea.

We recommend for immediate purchase and for a great rise EBERHARDT, KANSAS, RICHMOND CONSOLIDATED, and UTAH.
BUYERS of New Lovell shares, at £2½ per share.
Shares bought and sold at closest prices.
Telegrams promptly attended to.

MESSRS. ENDEAN AND CO., STOCK AND SHAREDEALERS,
55, GRAVESEND STREET, LONDON, E.C.

We strongly advise the prompt purchase of shares in the EAST LLANGYNOG LEAD MINING COMPANY (Limited). This mine will shortly pay a dividend. Apply at once for shares as above.

Our clients will remember that we have from the first advised the purchase of the TERRAS TIN shares, believing it to be, from our own inspection, one of the best tin-paying properties in the West of England. We have now only a limited number of shares for sale. We have 50 for sale, or any portion, at £3 each if applied for at once.
Great discovery of copper in the FRANCO CONSOLS TIN AND COPPER MINE. See Telegram at the office. The lode is similar in its character to the Devon Consols lode, and the mine is in the same district. You will do well in applying promptly for shares. We have 75 for sale, or any portion, at 25s. each for prompt reply.
ENDEAN and Co., 55, Gracechurch-street, London, E.C.

THE CITY EXCHANGE MINING AND INVESTMENT OFFICES,
32, NEW BROAD STREET, LONDON, E.C.
ALFRED FISHER, MANAGER.

Business transacted in all marketable securities for cash or account.
We strongly advise the purchase of EAST LLANGYNOG, FRANCO CONSOLS, and TERRAS TIN shares. Telegram just received—Great discovery of copper in Franco Consols, Devon Consols district. Apply promptly for shares.
We have the following shares for sale, or any part:—50 East Llangynog, at £3 each; 75 Franco Consols, £1½; 50 Terras also for sale.

MR. CHARLES THOMAS,
MINING AGENT, 3, GREAT ST. HELEN'S, LONDON, E.C.

MESSRS. A. W. THOMAS AND CO., 10, COLEMAN STREET, E.C., MINING AGENTS, AND STOCK AND SHAREDEALERS.
Monthly Circular for September now ready; post free, 6d.

MESSRS. G. LAVINGTON AND A. PENNINGTON,
44, THREADNEEDLE STREET, E.C., STOCK AND SHAREDEALERS,
have BUSINESS in the undermentioned:—

Birdseye.	Kitty (St. Agnes).	Pacific Gold.
Bog.	Mary Ann.	Sweetland Creek.
Eberhardt.	Powell United.	South Aurora.
Kellipse.	Pennerley.	Utah.
Great Wheel Vor.	Perkins Beach.	West Esgrail Ld.

Parties wishing to purchase or sell in the foregoing are requested to make early application.
WANTED—100 Pacific. SPECIAL BUSINESS in Tankerville.
LAVINGTON AND PENNINGTON, SWORN BROKERS.

TO INVESTORS.—NOW READY.

LAVINGTON AND PENNINGTON'S "MONTHLY RECORD OF INVESTMENTS," containing an exhaustive Review of the British and Foreign Stock and Share and Money Markets, &c., with an enumeration of safe investments, paying from 10 to 20 per cent. Price 6d. per copy, or 5s. annually. G. LAVINGTON and A. PENNINGTON, 44, Threadneedle-street, London, E.C.

SHARE INVESTMENTS.—Shares in good mines are now in great demand, and may be bought to give early and large profits if judiciously selected. The undersigned, having had considerable practical experience, offers his services to investors, and will furnish a list of his selections, both for permanent dividends and for a quick market rise.
T. E. W. THOMAS, Stock and Sharedealer, 3, Great Winchester-street-buildings, E.C. Established 1857.

N.B.—Mr. THOMAS, being an independent dealer, issues no circulars to induce capitalists to purchase shares that are unknown in the stock markets.

MR. T. A. MUNDY, STOCK AND SHAREBROKER,
33, BISHOPSGATE STREET WITHIN, E.C.
Bankers: City Bank.

MR. C. A. POWELL, STOCK AND SHAREDEALER,
No. 1, PINNER'S COURT, OLD BROAD STREET, E.C.
References exchanged. Bankers: City Bank, Finch-lane.

BARTLETT AND CHAPMAN, STOCK AND SHAREDEALERS,
36, CORNHILL, LONDON, E.C.
"Handybook for Investors," price 19s. 6d., post free.
"British Mines and Mining," price 2s. 6d., post free.

IMPORTANT TO INVESTORS IN BRITISH AND FOREIGN MINES, RAILWAY STOCKS, and other Securities of all descriptions.
Dividends at the rate of 5, 10, and 15 per cent.

Consult Mr. JOHN B. REYNOLDS' SPECIAL LIST OF INVESTMENTS.

Sent free by post on application to JOHN B. REYNOLDS, Stock and Share Dealer, 70 and 71, Bishopsgate-street Within, London, E.C.

INVESTORS IN SEARCH OF GOOD SOUND PROPERTIES,
paying 10 to 20 per cent. per annum, should send for the Sixth Edition of "BRITAIN'S METAL MINES," price 1s., or free per post 1s. 1d. A complete Guide to their Laws, Usages, Localities, Statistics, and Share Market.
By JOHN R. PIKE,
Crown-chambers, Threadneedle-street, London.

OFFERS WANTED for the following MINING SHARES:—
50 GREAT SOUTH CHIVERTON.
105 LIANARON.
10 EAST TREVARRACK.
20 TIN VALLEY.
20 LOVELL CONSOLS.
40 GREAT ROCK.
40 EAST WHEEL RETH.
50 NORTH JANE.
150 THE LOVELL.

No reasonable offer refused.
Address, "J. P." 438, Stockport-road, Manchester.

MR. W. E. JOHNSON (late Secretary of the Mining Exchange)
begs to OFFER his SERVICES to the public in the PURCHASE and SALE of STOCKS and SHARES in MINES, RAILWAYS, FOREIGN BONDS, &c. Having had over 17 years' experience, and a thorough knowledge of the business, is in a position to act advantageously for his clients.
19, Pinner's-hall, Old Broad-street, London, September, 1871.

MANY THOUSANDS OF POUNDS having been EXPENDED in OPENING UP the NUMEROUS LODES of the EAST BOTTLE HILL MINING COMPANY (LIMITED), the mine is now developed sufficiently to return a net estimated profit of £10,000 to £20,000 a year and upwards, or 30 to 60 per cent. on the nominal capital as soon as the steam stamps are at work.

A dividend of 7s. 6d. per share was declared last week in the adjoining mine, working on parts of the same lodes.

Plans and prospectuses may be had at the offices of the company, 19, Bishopsgate-street Within, City, London, E.C.

MR. JOHN CARTER, MINE AND SHARE DEALER,
CAMBORNE, CORNWALL (Son of the late Thos. Carter), transacts business in every description of shares at close market prices of the day.

References exchanged when required.

MR. T. W. GREENFIELD,
CHURCH LANE, TAVISTOCK.
PUBLIC ACCOUNTANT, AUDITOR, STOCK AND SHARE BROKER.
Sales and Purchases effected in British and Foreign Stocks, Funds, Railway Debentures and Preference Stock, Bank, Gas, and Mining Shares.
FURZE HILL TIN MINE specially recommended.

MESSRS. W. BRUNTON AND CO.,
SAFETY FUSE MANUFACTURERS,
REDRUTH, CORNWALL; and RYMDO, NEAR WREXHAM.

THE LONDON STOCK AND SHARE AGENCY
recommend the immediate purchase of SHARES in CASTLE AN DINAS and CASTLE GATE MINING COMPANIES.

OFFICES.—165, STRAND, LONDON.

THE LONDON AND PROVINCIAL INVESTORS' SHARE EXCHANGE (POWELL, DIXON, AND CO.),
26, CHANGE ALLEY, LOMBARD STREET, LONDON, E.C.

BUY and SELL every description of Stocks and Shares at close market prices net. Exclusive and reliable information on all the market mines.

EAST BOTTLE HILL MINING COMPANY (LIMITED).
The SHARE LIST will CLOSE for LONDON on SATURDAY, Sept. 23rd instant, and MONDAY, 25th instant, for the COUNTRY.

By Order, E. BREWIS, Secretary.

TO CONCESSIONAIRES, PROMOTERS, AND FINANCIERS.

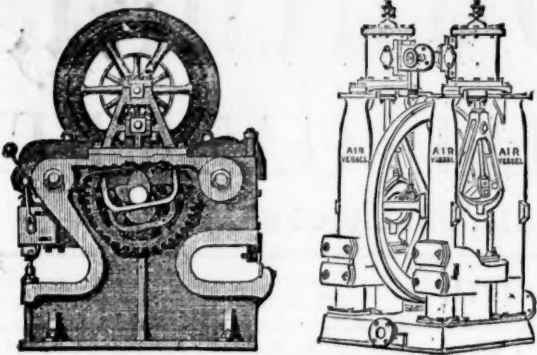
SHARES IN NEW ENTERPRISES SUCCESSFULLY INFLUENCED AND PLACED.
Address, in perfect confidence, "Operator," care of John Baptist Wolpert, Advertising Agent, 24, Austinfriars, E.C.

THE AUSTRALIAN AND NEW ZEALAND DIVIDEND GOLD MINES INVESTMENT COMPANY (LIMITED).
No. III. SERIES.

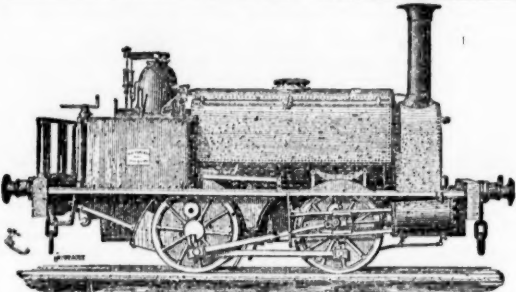
The SHARE LIST will CLOSE on SATURDAY, 23rd September instant.

THOMAS DICKER, Secretary.
Offices, 4, Royal Exchange-avenue, London, E.C.

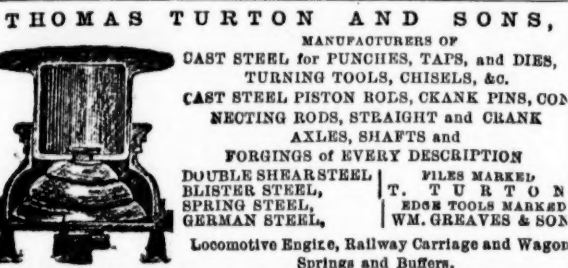
THE GOLD MINES OF VICTORIA AND NEW ZEALAND.—
SPECIMEN COPIES of DICKER'S "AUSTRALIAN AND LONDON GAZETTE" may be had FREE by forwarding address and stamp to the office.
4, Royal Exchange-avenue, London, E.C.

JOHN CAMERON,
MAKER OF

STEAM PUMPS, PORTABLE ENGINES, PLATE BENDING ROLLERS
BAR AND ANGLE IRON SHEARS, PUNCHING AND SHEARING
MACHINES, PATENTEE OF THE DOUBLE CAM LEVER
PUNCHING MACHINE, BAR SHEARS, AND RAIL
PUNCHING MACHINES,
EGERTON STREET IRON WORKS,
HULME, MANCHESTER.

TANK LOCOMOTIVES,
FOR SALE OR HIRE.

HENRY HUGHES AND CO,
LOUGHBOROUGH.



THOMAS TURTON AND SONS,
MANUFACTURERS OF
CAST STEEL FOR PUNCHES, TAPS, and DIES,
TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CON-
NECTING RODS, STRAIGHT AND CRANK
AXLES, SHAFTS and
FORGINGS OF EVERY DESCRIPTION
DOUBLE SHEARSTEEL, FILES MARKED
BLISTER STEEL, T. TURTON
SPRING STEEL, EDEN TOOLS MARKED
GERMAN STEEL, WM. GREAVES & SON
Locomotive Engine, Railway Carriage and Wagon
Springs and Buffers.

SHEAF WORKS AND SPRING WORKS, SHEFFIELD.
LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C.
Where the largest stock of steel, files, tools, &c., may be selected from.

BENNETTS' SAFETY FUSE WORKS,
ROSKEAR, CAMBORNE, CORNWALL.

BLASTING FUSE FOR MINING AND ENGINEERING
PURPOSES.

Suitable for wet or dry ground, and effective in Tropical or Polar Climates.

W. BENNETTS, having had many years' experience as chief engineer with
Messrs. Bickford, Smith, and Co., is now enabled to offer Fuse of every variety
of his own manufacture of best quality, and at moderate prices.
Price Lists and Sample Cards may be had on application at the above address

HEAT-ENDING PAINT.

THE TITANIC PAINT WILL ENDURE A DEGREE OF HEAT
that will ENTIRELY DESTROY all other known Paints.
BARS OF IRON have been coated with all the various known Paints, and
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combustion is perfect, and it will not fall or disintegrate in great heat before a
blast or strong draught, nor does it produce clinker.

It will bear rough usage and handling, without breakage.

As regards the manufacture, it is easily and cheaply made; the machinery
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sure is required, or exposure to heat, after moulding to dry or coke (as is usual),
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being so rich we shall raise tin very fast. We have also driven and stoped at the adit 29 fms., besides clearing the north level a great many fathoms, so as to ascertain to what extent the north level had been worked on. We found that it had been taken away for a considerable distance, thus showing that the lode must have been very rich or it would not have been taken away. Our last month's sale was not so much as the month previous, owing to the lode not being so rich, and we had none of the north lode. But now we have several points improved, and this month's sale will be very good, as we have ever sold, and coupled with the cutting of the north lode, your prospects were never so good as at present. By your next meeting we shall have a far better report to send you, as the sales of tin will be considerably over the last three months, and the mine paying cost, or more. I am pleased to say that I never had such a good opinion of Great Royalton as at present, feeling assured that you have a good mine; and now we have the whim-shaft holed, and the cross-cut nearly out to the north lode, I would recommend the sinking of the engine-shaft at once. This is most important, as the lodes have so improved from the adit to the 22 that at the 32 you will have, in my opinion, a splendid mine.—T. PARKYR.

Mr. J. H. CROFTS, in presenting the accounts and report, said that although they could not yet show a balance on the right side, the progress made during the past four months could not but be regarded as very satisfactory. Their sales of tin had realised 2007 more than those of the preceding four months, and it would be seen from Captain Parkyr's report that the returns would be again increased. He thought the agent's report very encouraging, and if the promises therein contained were realised the balance at the next meeting should be on the other side. Considering the small amount of capital expended and the present shallow workings, for it must be remembered that the tin they had sold (upwards of 8000, worth) had all been raised between the adit and 22 fm. level, he believed when the new sink was finished to the 32, and fresh levels driven, they could not fail to have a splendid mine.

The Chairman moved the adoption of the report and balance-sheet.

Mr. WHITCOMBE seconded the resolution, which was carried unanimously.

A call of 2s. per share was made.

A vote of thanks to the Chairman terminated the proceedings.

ROCHE CONSOLS TIN MINING COMPANY.

A general meeting of the shareholders was held at the offices of the company, 1, Finch-lane, on Wednesday, —
Mr. JAMES CROFTS in the chair.

The notice convening the meeting having been read, the minutes of the previous meeting were read and confirmed. The statement of accounts showed a cash balance against the shareholders of 934.1s.1d., and a balance of liabilities over assets of 4467.

The agent's report was read, as follows:—

Sept. 11.—I beg to hand you my report for your meeting. Since your last meeting we have started the engine, and I am pleased to say it is working well. We have sunk the engine-shaft from 7 fms. from the surface to 12 fms., having sunk 5 fms. We have also sunk a shaft 5 fms. for repeating the water over for the stamps; also driven a level from the dressing-floors 20 fms., holed it to the repeating-shaft, and put down repeating-lift, &c., in shaft. In driving this level we have discovered two other tin lodes; one contains good work for tin, and is 7 ft. wide. We have also completed nearly all the dressing-floors, covered in the tin-house, &c. In fact we are quite ready to start the stamps and to dress the tin, and have large piles of rich tin-stuff at surface ready for the stamps, and we have several points from which we can raise large quantities of good tin-stuff, so that the stamps will be kept fully employed, and everything being ready. The water for the engine-shaft so far has not been enough for the stamps, but it is now increasing, and I fully expect we shall have ample water by repeating it in a short time. I have 12 men engaged in sinking the engine-shaft with all possible dispatch, and shall commence driving to intersect the south lode in about a fortnight from this time, and the ground being easy for driving I expect we shall reach the lode in a week, when we shall have ample water for all purposes we require.—THOMAS PARKYR.

The CHAIRMAN, in moving the adoption of the report and reception of the balance-sheet, remarked that, although the agent had not been able to fulfil his promise to commence stamping in July, yet the delay had arisen from entirely uncontrollable circumstances—want of water. The time, however, had been well spent, as a good repeating-lift had been erected, which would enable them to work with a very moderate supply at all seasons. The water was now increasing at the engine-shaft, and within a fortnight the stamps would be at work. The report just read would show the shareholders the position of the mine at the present time, and he need only add that they would soon be selling tin and realising the profits promised by the agent.—Mr. F. R. KIRK seconded the resolution, which was carried unanimously.

A call of 2s. 6d. per share was made, and after a vote of thanks to the Chairman the meeting separated.

CWM DWYFOR COPPER AND SILVER-LEAD MINES.

The following report on these mines has just been received at the offices of the company, from Capt. THOMAS HENWOOD, of the Snailbeach Mines:—

Your important property contains a greater variety of first-rate lodes of copper and lead than I have witnessed in any part of England, Ireland, or Wales. The copper ore lodes are not only immense in width, but beautifully interspersed with muddle, yellow and peacock copper ores, of a quality rarely to be met with. I must confess that in all my experience at the Powys Consols, in Wales, Ireland, and in the rich mines of Shropshire, I never before saw lodes bearing such quantities of copper ore so near the surface. The lead lode is of great width, but was not sufficiently laid open at the time I visited the mine to admit of its being actually measured; the lode, however, may, in my opinion, be safely set down at 6 ft. in width. It contains rich spots and leaders of solid lead, and a little copper.

The great cross-course intersects all the lodes—a fact which is well worthy of attention. The natural advantages of this set are of a decided character, and cannot be too highly estimated; the configuration of the ground is such as will admit of the property being worked at a minimum cost, by means of deep adit levels, which can intersect all the lodes contained in the set, cutting the lodes at an immense depth; thus the expense of sinking very deep shafts and erecting costly machinery will be rendered unnecessary. Considering the number and extent of the lodes, that no expensive shafts, with pumping apparatus, have to be sunk, that you have an abundance of water-power, and are within a few miles of a shipping port, I do not know where I could point out another property of equal value, as a safe and profitable investment. —THOMAS HENWOOD.

Sept. 11. (Snailbeach Mines, Shropshire.)

MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

NEW CROW HILL.—The main lode has been discovered under the side in the 35 fm. level west, producing stones of rich silver-lead, and showing all the indications of a productive lode at deeper points. This discovery is of great importance, and in a great measure establishes the mine, showing that the western part is the continuation of the lead-bearing course.

NORTH KINGSTON.—In continuing the driving of the lode east from intersection it is everything that can be desired; in fact, the agent says that he cannot report anything better until he can say that he has a course of ore. The shaft is being sunk with all speed; now down 7 fathoms, and water faster, which is a good sign.

WEST ESKAIR LEE.—From recent reports received from this mine the prospects are slightly improved. The sinking of the shaft under the adit has been commenced, where the lode maintains its size and character, being 9 ft. wide, with more lead ore and spar—an ore lode throughout, every stone of which goes to pile. The wheel will be ready to work by the end of this month, when better results cannot fail to be attained. Mining engineers in that part of the county are watching this mine with great interest, it being averred that no lode of equal promise has been opened on since the discovery of the celebrated Frongoch Mine. The lode, from which 300 tons of lead ore are monthly raised, is pronounced to be identical in character with that of the West Eskair Lee, and it is felt that equal results will be attained in the latter mine at a very early period.

LEEDS AND ST. AUBYN.—The sump-shaft is nearly down to a rich tin lode, from which point developments will be made of parallel lodes, which, in the opinion of practical miners, will make this one of the most productive tin mines of the day.

GWYDYR PARK.—The "Tyntwll" is opening out well. New lead ground is being opened, and a large extent of profitable ground will soon be available.

POWELL UNITED.—During the past week the re-organisation of this company has been completed, and letters of allotment have been forwarded to the new shareholders. Now that the necessary capital has been subscribed, the company can proceed at once to make those alterations in the working of the property which cannot fail at no distant date to prove highly remunerative to the adventurers. The courses of ore being long and rich, good returns are but a matter of detail, and large profits will speedily follow. To prognosticate the success of this company requires no prophetic eye, since the riches are already in sight.

A very important discovery has taken place at FRANCO CONSOLS, in the old part of the mine, where they had previously courses of copper ore worth 200l. per fathom. The miners say that it is the best lode they ever saw in the mine. The shareholders may now congratulate themselves for their untiring zeal, and the spirited manner in which they are prosecuting the work, which will not only tend to increase the employment for the labourers of the district, but we feel assured the proprietors will be handsomely remunerated for their outlay, and we wish them all the prosperity that they may desire for themselves.

EAST Llangynog.—Captain Hodge has recently examined this mine, and has given a splendid and truthful report. He says it will be one of great magnitude.

NANTY BLAIDD (Silver-Lead).—This property has been visited this week by a large shareholder, in company with an experienced mining engineer residing in the district, who were very pleased to see the improvements that have taken place in the lode as they drive west into the hill from the dingle. Fine samples of lead ore were broken from the lode, and there are fine leaders of lead ore standing up and down the end. From the very favourable appearance presented at this point it is reasonable to expect that when the lode is intersected in the deep adit large masses of lead will be met with, while from the immense quantity of water issuing from the present end the intersection of the main lode is daily expected.

WEST ESKAIR LEE.—Capt. R. Harvey (Sept. 14) reports:—The shaftmen are making fair progress in sinking Hamilton's engine-shaft under adit level, although the water is at present pretty quick. We have about 5 fms. of the lode in the shaft, which is chiefly composed of lead, copper ore, gossan, and spar, with every appearance of improving as depth is attained. The lode in the adit, west of Hamilton's engine-shaft, is looking well, and from which

we have this week broken some fine stones of lead ore, intermixed with gossan and copper ore, and principally from the bottom of the level, which speaks well for a good course of ore at our next level. The carpenters are going on well with the erection of the water-wheel, and we hope by the end of the week to have the wheel together. No other change to notice.

GORSBDD AND CELYN LEVEL.—It is most satisfactory to notice the lively improvement at these mines. The spirited working will, no doubt, result in large profits, and a permanent dividend property.

ROCHE CONSOLS.—On Wednesday rich work for tin was cut in the engine-shaft. The water has increased so much that stamping will be commenced early next week.

EAST FOXDALE.—The starting of the engine at this mine a few days since was made the occasion of eliciting some important information as to its history and prospects. Mr. Peter Watson, who occupied the chair at the luncheon following the ceremony, stated that the mine was worked some 25 or 30 years since, and after some time operations were suspended—again it was worked, but on account of great discoveries elsewhere operations were once more discontinued. Upon negotiations with a view to purchase, the late company deliberated as to whether they would sell or re-work the property, one or the other being obligatory upon them. The proximity of the mine to Foxdale promised great success. Capt. W. Kitto, the manager of Foxdale, said he hoped to hear in a short time of the directors of East Foxdale declaring a dividend, which reward they really deserved. Capt. Kelly, who had been at the mine some 40 years, expressed an undiminished confidence in the success of the mines upon a vigorous development. Capt. Rowe, manager of Great Laxey, ventured to promise the enterprise a successful career. The mine was situated in a rich neighbourhood—Foxdale had been a paying mine for between 50 and 60 years; East Foxdale was in the same stratification, and he believed it would become a mine to rank as high as those others which had distinguished the Chairman in the mining world, and another great success in the Isle of Man. Among those present were—Messrs. C. Cleator (director of Great Laxey), T. Woodgate, G. W. Stramont, C. D. Watson, J. A. Mylrea, J. Dixon, the Revs. F. J. and H. Moore, and Capt. J. Bawden, B. Saunders, &c.

GOLDEN UNITED MINES.—Capt. G. E. Tremayne and John Borslase state that a piece of virgin ground has just been added to this promising mine. The additional piece of ground is traversed by three well-defined lodes running the entire length of the sett. A caunter lode, in addition to the elvan courses, intersects these lodes, about which the lead lodes of this district make large deposits. It is their opinion that large returns of silver-lead will be made. The mine is about to be worked by Mr. R. F. Michell, of Truro, who proposes to issue 500 shares on the Cost-book System. It is said that many of his influential friends have already promised to join Mr. Michell, who expects no promotion-money, simply desiring to start a most promising concern. At the first meeting of shareholders definite arrangements will be made for the future.

MINING IN NORTH DEVON.—The Russell Silver-Lead Mine will shortly commence. A shaft will be sunk near the junction of the lime with the clay-slate, and the lodes intersected at about 14 fms. from surface, when an important discovery is expected. These lodes have been privately worked on for 100 fms. further west to the depth of 20 fms., and have produced splendid specimens of silver-lead, from 7 to 20 lbs. weight each. One of these argentiferous lead veins is 12 ft. wide; the other about 3 ft.—a mine in embryo.

WHEAL VINCENT (Altarnun).—This mine has been re-started after being idle for upwards of 20 years. They have opened on the back of No. 3 lode; it is 5 ft. wide, and in the last 8 ft. sinking there was broken 10 tons of stuff that will make a produce of 2 qrs. of black tin to the ton of stuff; this tin will make 80l. per ton. On No. 4 lode they have cleared up the old men's workings 4 fms. from surface, and have sunk 2 ft.; the lode is 1 ft. 6 in. wide, and worth 4 cwt. of tin to the fathom of ground that would be the length of shaft.

FOREIGN TIN SALES.—(from a Correspondent).—Messrs. H. Bath and Son have invited tenders for 300 tons of Straits and Malacca tin, and as this quantity is equal to one-tenth of that to be offered at the Dutch sale, to be held only a week later, the result cannot fail to have an important influence upon prices. The stability of the market would appear to depend much upon the strength of present holders, who have already large stocks on hand. If they can temporarily take this 300 tons off the market, the maintenance of a good figure at Rotterdam on the 28th may enable them to reimburse themselves, but otherwise lower prices for Banca may certainly be looked for, inasmuch as with 300 tons of foreign tin (the equivalent of two months' deliveries of Banca) on the market in the hands of small holders it will be far more difficult for the few to maintain present rates.

MINING LITERATURE.—A volume, which promises to be of great value to practical miners, is at present preparing for publication, and will be ready for issue in the course of a few weeks, by Messrs. Dewey and Co., of San Francisco, under the title of the *Explorers', Miners', and Metallurgists' Companion*, by Mr. J. S. PHILLIPS, who is well known to the readers of the *Mining Journal* as having considerable experience in mining in Cornwall and whose name in America is connected with the "Wee Pot" assaying machine, which, although capable of being packed for travelling in a 5 or 6 inch box, contains all the apparatus necessary for roasting, fusion, ignition, and all the general purposes of the analyst and assayer. Mr. Phillips's volume is divided into five sections. That treating of Geology and Mineralogy describes the formation of the earth, mineral veins, &c.; the supposed actions and reactions that have been, and are continually, taking place; the peculiar characteristics of true fissure veins; and the more generally recognised preliminary indications, in the low temperature veins, for the probable increase of mineral in depth. The second section teaches how to explore, where to explore, the peculiar kinds of the primitive and secondary rocks that concern the miner, as being most congenial for rich veins, &c. The remaining three sections are devoted to assaying and discriminations, mining and engineering, and metallurgy, respectively. The volume will fill some 600 pages, more than three-fourths of which is already printed. Messrs. Trübner and Co., of Paternoster-row, will supply the book in England, where it will, no doubt, find many readers.

COPPER ORES.

Sampled August 23, and sold at Swansea, September 12.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Cape Ore ..	59	29	£19 18	Moonta Ore ..	99	174	£11 18
ditto	59	29	19 18	Knockmahon ..	19	78	5 1
ditto	59	29	20 6	ditto	134	8	5 12
ditto	59	29	20 9	West Canada ..	99	194	13 18
ditto	59	29	20 11	ditto	83	194	13 18
ditto	59	29	22 10	ditto	35	194	13 18
ditto	18	28	19 9	C. Ore del Soto ..	99	204	14 3
ditto	12	28	25 13	de la Hay ..	44	144	9 10
ditto	12	28	19 12	Brass Ashes ..	90	4	1 10
Cape Reg. ..	8	67	£6 18	Dyffido	67	6	3 16
Berehaven ..	129	8	6 18	Paramatta ..	68	14	9 12
ditto	82	8	5 10	Mixture	12	4	1 15
Moonta Ore ..	81	18	12 19	ditto	12	5	2 10
ditto	80	18	12 19	Lisbon Ore ..	19	14	9 8
				Copper Ore ..	18	21	14 7

TOTAL PRODUCE.

Cape Ore & Reg. ..	381	£8052 4	Brass Ashes ..	90	£125 0
Berehaven ..	340	1837 4	Dyffido	67	254 12
Moonta Ore ..	260	3 65 10	Paramatta ..	68	277 10
Knockmahon ..	244	1308 13	Mixture	65	124 11
West Canada ..	217	8016 6	Lisbon Ore ..	19	178 12
C. Ore del Soto, &c. 124	1552	0	Copper Ore ..	18	258 15

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
P. Grenfell and Sons ..	873	£4617 7
S. Wills, and Sons ..	421	703 15
Vivian and Sons ..	421	4967 7
Williams, Foster, and Co. ..	372	4732 8
Mason and Elkington ..	358	2128 5
Sweetland, Tuttle, and Co. ..	220	3491 14

Total .. 1885 .. £20,560 17 6

NO SALE ON October 3.

21 cwt.	Produce.	Price.	Per unit.	Standard.
Whole sale ..	1885	16	£10 18 2	13s. 7½d. .. £9 15 0

COPPER ORES.

Copper Ores for sale at the Royal Hotel, Truro, on Thursday next—Mines and Parcels.—Devon Great Consols 1374—Marke Valley 530—South Caradon 528—Brookwood 262—West Maria and Fortesque 218—Wheal Friendship 203—East Caradon 195—West Caradon 126—Gunnislake (Gitters) 122—Franco Consols 20—Virtuous Lady 14—Perran Wheal Virgin 4.—Total, 3596 tons.

ATMOSPHERIC GAS.—In the improved method of carburizing at atmospheric air, invented by Messrs. DUPAS and BARBARIN, of New Orleans, it is proposed to preserve uniformity of temperature in the hydrocarbon at the point required to produce the best result, under varying conditions of the temperature of the external air, by the following devices:—They use a revolving feeding wheel, in combination with a box recipient, in which is employed water or other suitable liquid packing. The carburizer is enclosed in a vessel and surrounded by water or sand, and an outer packing. A receiver is provided with two apertures, and surrounded by a water vessel, and the latter is connected with the box by a pipe. They combine the receiver and its adjuncts with the devices for preserving uniformity of temperature by means of a pipe and elbow, and with an indicator provided with a gauge. The carburizer is divided into gas and hydrocarbon chambers, and the latter are enveloped by water-containing spaces in an outer vessel, with a thermo-syphon, in which there is a globe section. The carburizer is provided with the adjuncts herein specified in combination with a reservoir, and the hydrocarbon is automatically fed from the latter by pressure from the gas. A rod is arranged in combination with a float, to act on an index-hand to show the depth of the hydrocarbon in the carburizer. In combination with a recipient, a tank, and the carburizer, and with or without an enveloping vessel, they use small pipes, in which the air is heated by a burner. These parts are used in combination with the rod and indicating appliances with this apparatus. They carburize atmospheric air by forcing a continuous current of air through the carburizer, and the said current or currents are so regulated that the precise quantity of air needed, at the time it is needed, is carburized.

ECONOMY OF FUEL.—Messrs. Laird Brothers, a few months ago, lengthened the human steamer Etina about 4½ ft., and replaced her old engines of 250-horse power with new engines on the "compound" principle, of the same power. The Etina is now called the City of Bristol, and has made one voyage across the Atlantic and back her consumption of coal being 20 tons per day, against 60 tons formerly, having largely increased accommodation for passen-

gers and cargo. She can now carry sufficient coals to take her to New York and back, in addition to a large cargo. The fact of her being lengthened enables her to carry more cargo and passengers, thus rendering her a much more profitable ship, her speed now being as great as before.

THE ACTION OF WATER ON IRON.

Mr. SAINTE-CLAIRE DEVILLE subjected perfectly pure iron to the action of water-vapour of known tension and temperature, at the same time maintaining the temperature of the iron constant throughout each experiment. The apparatus he employed was a porcelain tube, to contain the iron, communicating at one end with a glass reservoir, which furnished the water-vapour, and at the other with a manometer. Arrangements were made to exhaust the apparatus by a Sprengel pump, or to pass through it hydrogen or other gases. Constant temperatures were obtained by the use of an oil or a mercury bath, or by the vapours of boiling mercury, sulphur, cadmium, or zinc, the respective temperatures of which are 360°, 440°, 860°, and 1040° Cent. With this apparatus he found—1. That iron continues to oxidise in water-vapour, until at a fixed temperature the tension of the hydrogen set free becomes constant.—2. At the point of maximum tension for any given temperature, lessening the pressure by withdrawal of some of the hydrogen, causes a renewal of the action of the iron on the vapour, which continues till the constant is restored; or if hydrogen is sent into the apparatus, so that the pressure is increased beyond the constant value, some oxide of iron is reduced, and the pressure restored by the condensation of the water thus formed.—3. When heat is applied to the apparatus, the tension is preserved by the condensation of some of the hydrogen on the oxide of iron.—4. When the temperature of the vapour is maintained the same, but that of the iron is made to vary, the tension of the hydrogen is less as the temperature of the iron increases. At 200° Cent. the tension of the moist hydrogen = 100 mm.; at 260° it is 68.8 mm.; at 360°, 45 mm.; at 440°, 30.4 mm.; at 860°, 17.7 mm.; at 1040°, 13.5 mm.; and at the melting point of iron, 9.7 mm.—5. The higher the tension of the water-vapour, the temperature of the iron remaining the same, the higher is the tension of the hydrogen, and as the tension of the vapour increases the increase of tension of the gas is more than proportionate, the difference of increase becoming less and less, however, as the temperature of the iron is raised.—6. All these laws hold good when a small quantity of hydrogen is allowed to act on a large quantity of oxide of iron. M. Sainte-Claire Deville also accounts for the singular erosion of the iron of steam-boilers by distilled water, by the fact that iron is slowly attacked by steam at 150° Cent. The oxide formed by steam acting on iron at the temperature of 440° Cent. has a composition corresponding to Fe²O³; it is amorphous, black, magnetic, is scarcely affected by nitric or sulphuric acids, but is readily soluble in cold hydrochloric acid, forming a deep brown solution, with which potash forms a black precipitate. The remarkable fact is thus clearly elicited, that iron is much more acted on at low temperatures than at high ones.

AMBER.

A very large proportion of the amber supplied in the various markets of the world is supplied by the province of Prussia, including the neighbouring district of Memel. The following particulars are gleaned from a report by Mr. Ward, Her Majesty's Vice-Consul at Memel. In the western portion of the province of Prussia amber is found not only on the seashore, but also in the mountainous ranges of the interior; excepting, however, in rare cases of its appearance in so-called "nests," amber is only to be met with in isolated places in the latter localities, so that the profit arising from the amber diggings among the hills is but a very moderate one, and may be estimated at about double the amount paid by the proprietors for the wages of the diggers. In East Prussia, however, and especially in that part called the Samland, amber is more abundant, and during the prevalence of certain winds is frequently thrown upon the shore by the sea in large quantities; it is collected there, as well as fish for in the surf; it is also dug out of the sand hillocks running along the seacoast. In these sand hillocks regular beds of amber are found enclosed in a soil of blue clay, which is to be met with at an average depth of about 100 feet in a thickness of 25 feet to 30 feet. It is stated that out of some diggings established in those parts 4500 lbs. of amber were raised in the course of four months of the year 1869. Diggings of this kind exist at present in various spots of the Samland. There are establishments at Brusterort, where amber is obtained by divers from the bottom of the sea, and at Schwarzwald, Memel, where it is raised by dredging for it at the bottom of the Curish Haff; the importance and size of the dredging establishments last mentioned has of late years increased considerably, and at present about 80,000 lbs. of amber are annually obtained by it. The total amount of amber obtained during the year 1869 in all parts of the province of Prussia by the various means of collection is estimated at about 150,000 lbs., the value of which may be taken 550,000 Prussian dollars. The quantity collected (by fishing for in the sea and upon the shore is about equal to that raised by digging and dredging works. According to the opinion of competent persons, the produce of the diggings could be increased considerably by working them upon a regular mining system. Apart from the fact that no certain knowledge has hitherto been arrived at as to the actual extent of the amber fields in the blue clay,—and these exist most probably not only in the vicinity of the seacoast, but in the interior of the Samland, and even beyond that district to the frontiers of Eastern Prussia,—it is most likely that below the stratum of clay to which the diggings are at present confined there are other strata in which amber would be met with. This supposition is based upon the circumstance that considerable quantities of amber have been found among the soil washed away by the sea during heavy gales from those portions of the coastal sandhills which lie below a layer of blue clay first alluded to. The prices of the principal kinds of amber, as stated by an official report, vary according to the quantity ranging from 22 Prussian dollars per pound, where the pieces are about nine to the pound, to 4, where the pound requires 100 pieces or more. The prices of larger (so-called cabinet) pieces are subject to great fluctuations, and are fixed by the increase or decrease of demand from the East; the prices of the commoner kinds sold vary more than about 10 per cent. The chief seat of the retail and trade is Dantzic; the wholesale trade is at present in the hands of only two or three firms in the province of Prussia. The working of the Prussian amber into mouthpieces, beads, &c., is likewise carried on chiefly at Dantzic, but also in all large cities; of late a small factory of amber wares has been established at Polangen, a Russian town near Memel, and it is intended to open similar works at Königsberg, Moscow, and at New York.

IMPROVEMENTS IN MOTIVE-POWER ENGINES.—The inventor, Mr. R. M. MARCHANT, of Kirby-street Hatton Garden, primarily contemplates the application of highly compressed or stored or manufactured steam, air, or in such manner that any specific charge or proportion of the total capacity of the cylinder can be delivered when the piston is at any determined position of the cylinder during its commenced stroke from either end of the cylinder, when any other analogous medium for the conversion of the pressure of steam, air, or gas into motive power is at any determined position.

MANUFACTURE OF MALLEABLE CAST-IRON.—The annealing process used in connection with the improved apparatus for the manufacture of malleable cast-iron, invented by Mr. F. A. PAGET, of the Adelphi, and continuous in their action, and the cast-iron crucibles or pans are rendered capable of scaling. An annealing furnace, somewhat similar in its features to that most commonly used, is constructed at the inner end of each of the two long grates, with a long fire bridge. The interior space between the two fire bridges is left open, and kept level with the grates. On this is laid a line of rails, communicating with a turn-table in front of the furnace, and thence with rails in every convenient direction. Trucks packed with fire-brick, and carrying the tiers of pans within which the cast-iron is run into the furnace. The bottom sides of the trucks are covered with a covered air channel, opening only outside. The door of the furnace is either bolted to the end of one of the trucks, or it is made separate and slides on the front, on rollers. It can also be made with an independent set of rollers. Tubes are made or fitted in through the arch of the pans, when the top of the fuel, such as breeze from the ash-pits between the pans, when the top of the trucks get sufficiently hot to inflame it. Steps are made to the top of the tubes to obtain access to these holes. Modifications in detail can, of course, be introduced, without affecting the principle of the invention. Thus, the fire can be fired from the same end as that of the large door for the trucks, or the opposite end. The firing tubes from above may be entirely dispensed with. Step or inclined grates may be used, fired from both ends. The fire can be led from the grates through slots in the fire bridge, raised up to the top of the oven. Instead of two fires only one may be used, opening into the

The door may be adjusted to a separate truck, or it may be set on hinges. The turn-table may be dispensed with, the trams being run direct into the open, or a turn-table may be conveniently placed between the fronts of two open, or two opposite ovens. The heat is kept in by building the ovens with thick walls, or it may be built with a casing of sand. The iron annealing pans are cast with vertical dovetails, so as to hold a fire-proof coating of clay when they are cast with running them into the oven. Many other forms of roughened surfaces are noticed, but this one is preferred. The same plan is to be applied to the surfaces of the parts of the annealing cases of case-annealing ovens.

SEPARATION OF GOLD AND SILVER WITH PROTO-SULPHATE OF IRON.

For some time past an ingenious and economic process of separating gold and silver, the invention of Dr. F. GUTZKOW, has been in use at the San Francisco Assaying and Refining Company's works, and given highly satisfactory results. Large quantities of sulphate of copper, only saleable with difficulty, being produced by the ordinary process Dr. Gutzkow sought to limit its production. It was found impracticable to substitute sheet iron for the sheet copper in the precipitation, as the copper was, of course, re-precipitated with the silver, but he discovered that the reducing agency of proto-sulphate of iron could be applied to the solution of the sulphate of silver. It is not practicable to work on the large scale with sulphate of iron upon the solution of sulphate of silver in water, and is, therefore, requisite to prepare first crystallised sulphate of silver free from impurities, inclusive of metallic gold, in a finely divided state, sulphate of lead, and other substances insoluble in a solution of protosulphate of iron. The pure crystallised sulphate of silver is next acted upon by a hot concentrated solution of the protosulphate, and the hot, turbid, thickish fluid resulting is poured into a large size cast-iron cauldron, containing dilute sulphuric acid (1.617 sp. gr.), previously heated to 110°, and sufficient water is added to reduce the very concentrated acid silver solution to the same density. After a few minutes rest the liquor will clear, when it is syphoned off into another similar cauldron, capable of being rapidly cooled from the outside. Every hundredweight of silver refined requires 10 cubic feet of the dilute acid.

The addition of the water above referred to serves another purpose besides that already mentioned. Precipitates of sulphate of lead and sulphate of silver are formed, and the latter does not become quite permanent until, first, all the lead which was in solution is precipitated; and, moreover, these heavy precipitates aid to throw down all substances which render the liquor turbid, and especially the gold. Thus a clear liquid, free from lead and gold, is obtained far more rapidly and completely than by the usual method of pouring the very concentrated sulphuric acid silver solution into water. The liquid having been cooled to 30° or 40° is pumped into the upper cauldron, there to be used again as acid, at 1.617 specific gravity. At the bottom of the cauldron in which the cooling took place the sulphate of silver will be found deposited, forming a hard yellow-colored crystalline crust, about 2 inch thick, and tolerably free from adhering acid, but at the deepest part of the vessel there is always some strongly acid mother liquor, and this acid is to be again used to dissolve a fresh quantity of silver. The crystalline sulphate of silver removed from the cauldron by means of iron shovels, and placed on the perforated false bottom of a wooden box, lined inside with lead, and placed on wheels, so as to be removable from place to place; between the two bottoms there is a tap for running off the liquor.

A red powder, consisting chiefly of sulphate of copper, will be found adhering to the crystals. To separate this a very hot and very concentrated aqueous solution of protosulphate of iron is used. The salt of copper is first dissolved, and, therefore, that liquid is run off separately, afterwards to be used for the preparation of sulphate of copper. When the pure brown colour due to the sulphate of peroxide of iron begins to show itself the solution is run into a large, very shallow vessel, in which, on cooling, the largest portion of the silver salt is decomposed, and some metallic silver is deposited in a spongy state, collected and placed on a filter. The greater portion, however, of the crystalline mass of sulphate of silver which had been placed in the box is converted slowly into a dense coherent mass of metallic silver, and the reduction may be considered complete as soon as the protosulphate of iron solution which runs off has assumed its original green colour. The metallic silver is next washed with pure hot water, then pressed in a hydraulic press, and lastly melted. The sulphate of the peroxide of iron having become sufficiently cool is poured into a lead-lined tank, with scraps of sheet-iron, and is thus converted into protosulphate of iron for use in a subsequent operation. The small quantity of silver and copper separated by this last mentioned operation are collected from time to time, and re-treated with a fresh charge. Every hundredweight of silver reduced from the sulphate requires 20 cubic feet of the protosulphate of iron solution.

BREAKING AND CUBING STONE.—An improved machine for this purpose has been invented by Mr. J. R. RIDER, of Melbourne, Australia, in which an oscillatory or vibratory motion is imparted to the upper part of a section lever or hammer. This lever is connected to the cam shaft by a pair of cam working in a slot in such a way, the lower end thereof being supported by a pin proceeding from the side of the camshaft. On each side of this lever is a jaw with a flange which fits into a groove in the side of the lever. The upper portion of each of these jaws is kept in position by an iron

band. Opposite each of these moveable jaws is a fixed jaw attached to each end of the casing, and having flanges proceeding from its upper ends with slots cut in them to permit of their being fastened by wedges. The gauge of stone to be broken is adjusted by the insertion of packing between the jaws and the casing. The face of the jaw consists of a series of recesses, and consequently the acting surface of the face of each jaw consists of a series of transverse lines or ridges. Those on the moveable jaw work between those on the fixed ones.

IMPROVED RAILWAY BRAKES.—An oval-shaped boss is, according to the invention of Mr. J. A. BAXTER, of Belfast, keyed to each axle between the wheels, which revolves between two sides of a strong guide frame. A wedge, or wedge-shaped block, is free to travel between the guide frames and oval boss, but when lowered the rotation of the boss and the wheels are stopped. The wedges are connected by chains to a rod running along the carriages and joined couplings with each carriage, and this rod is connected to the piston rod of a steam cylinder, whereby the wedges are raised or lowered, and the brake power thus put on or taken off; or in some cases the power is applied by a screw lever, or other means.

STEAM-ENGINES.—Messrs. W. R. OSWALD and W. K. SWADDELE, Sunderland, cause the water from the condenser to be injected amongst the exhaust steam from the engine, and the water thus heated is led away to be forced into the boiler. The water from the condenser is caused to be pumped up into a cistern or reservoir, and from the bottom of this cistern it is conducted by pipes amongst the exhaust steam of the engines. The inlet to each of these pipes is fitted with a valve, the opening and closing of which is so controlled that a small quantity of water shall always be retained in the cistern. When the valve is raised the vacuum in the exhaust draws water from the cistern, and the water, falling or forced in a shower into the exhaust pipe, is heated by the steam passing from the cylinders. A cistern or reservoir is provided for the heated water to collect in, from which it is led away and pumped into the steam boiler. Provision is made for preventing the spray of water which is injected into the exhaust pipes from being carried over with the steam into the surface condenser. Provision may also be made for causing the water from the condenser to be pumped directly from the condenser to the boiler in case the feed water heater should require repair.

METAL FOUNDERS' BLACKING.—To provide metal founders with a blacking possessing good sticking and heat-resisting properties, and to enable them to produce castings with smooth skins of desired hues, J. C. SELLARS, Birkenhead, mixes sea weed, sea grass, or sea plants, in any convenient or desired proportion, with still coke, peat charcoal, soft wood charcoal, gas coke, coked coal, oil retort coke, coal dust, soot, hard wood charcoal, or other suitable coke or charcoal, or with lime, chalk, or clay, or with a mixture of two or more of these substances. The sea weed may be added in the newly cut, partially dried, dried, or pulverised state to the coke, charcoal, lime, chalk, or clay, the latter being either in a rough or ground condition. The addition of sea weed to coke, charcoal, lime, chalk, and clay in every proportion, so long as the moisture is insufficient to cause the mixed mass to form a paste in the process of reducing or grinding, or to cause the particles of the blacking when furnished to adhere and form lumps, is beneficial either, first, for improving the quality, or, second, for reducing the cost.

At East Pool Mine meeting, on Monday, the accounts for June and July showed a profit of 1799. 11s. 5d. A dividend of 1600. (5s. per share) was declared, and 1462. 18s. 6d. carried to the credit of next account. The committee stated that that portion of the expenses and materials for June and July months pertaining to the erection of the new drawing engine, and amounting to 10500., including the cost of Wheel Trolley machinery, &c., had been placed to the suspense account, to be discharged as expressed in the statement of accounts rendered on July 10. [The agents' report is among the Mining Correspondence.]

At Rosewall Hill and Ransom United Mine meeting, held at the mines, on Wednesday, the loss on May, June, and July working was 2901. 1s. 11d., leaving a debit balance of 2901. 1s. 11d.

At Hingston Down Consols Mines four-monthly meeting the accounts showed a cash balance in hand of 4101. 1s. 11d.; and an estimated account of payments and receipts before the meeting, to be held in January, 1872, showed an estimated credit balance of 1003. 1s. 3d., with an asset of 10900. Capt. James Richards says:—During the next four months we shall, from present appearances, be in a position to sell at least 20000. worth of ore, at a monthly cost of about 3300.; and, in conclusion, I have the satisfaction of congratulating you on the present prosperity of the mine, and the encouraging prospects in view.

At the Great Royalton Mine meeting, on Wednesday (Mr. James Crofts in the chair), the accounts showed a cash balance against the mine of 1382. 18s., and a balance of liabilities over assets of 4261. 9s. A call of 2s. per share was made. The sales of tin realised 5111. Details in another column.

At the Roche Consols Mine meeting, on Wednesday (Mr. James Crofts in the chair), the accounts showed a balance of liabilities over assets of 4461. A call of 2s. 6d. per share was made. Details in another column.

At the Central City Mining Company meeting, on Tuesday (Mr. Lindow in the chair), it was unanimously resolved to wind-up the company.

At the Fergusson Gold Mining Company pro forma meeting, on Thursday, an adjournment till October was agreed to.

COAL MARKET.—We had 86 fresh arrivals this week. The demand for household coals has been more active, and prices have advanced from 3d. to 6d. per ton. Hartley and manufacturers' coals have remained steady, and without change in prices. Hetton Wallsend, 18s. 9d.; South Hetton Wallsend, 18s. 3d.; Lambton Wallsend, 18s.; Tees Wallsend, 18s.; Harton Wallsend, 15s. 9d.; Hetton Lyon's Wallsend, 15s. 9d.; Hartlepool Wallsend, 17s. 3d.; South Kellow Wallsend, 17s. Unsold, 1 cargo; 10 ships at sea.

BIRD.—On Sept. 4, Mr. WILLIAM TUXFORD, aged 64, who had been for many years extensively connected with mining, especially in the Isle of Man. His loss will be greatly felt by a large circle of friends, by whom he was highly esteemed.

HOLLOWAY'S OINTMENT AND PILLS—RELIEF AND REMEDY.—It is useless here to enter into the question how this ointment works such astounding cures of all descriptions of sores, ulcers, bad legs, and scrofula and scrofulous eruptions. Sufficient it is for all sufferers to know that the united testimony of thousands proves the healing powers of Holloway's ointment, and earnestly recommends its trial to all afflicted with these maladies. When this treatment is once commenced, the ease and comfort it bestows will induce its ready continuance till the cure is completed. A vast advantage in using Holloway's widely appreciated medicaments arises from the fact of their requiring neither confinement nor much change of diet to exert their unfailing sanative effects.

MESSRS. CHADWICKS, ADAMSON, COLLIER, AND CO. INVITE SUBSCRIPTIONS TO

Earle's Shipbuilding and Engineering

COMPANY (LIMITED).

CAPITAL £300,000, IN 6000 SHARES OF £50 EACH.

Deposit £2 on application, and £8 on allotment.

A second call of £10 per share will be made payable in January, 1872. It is expected that no further call will be made during the first year. Shareholders may stipulate in their applications for the payment in full of the shares, and receive interest at £5 per cent. per annum on the amount paid in advance.

DIRECTORS.

E. J. REED, Esq., C.B., late Chief Constructor of Her Majesty's Navy—CHAIRMAN.
Sir JOHN BROWN, Endcliffe Hall, Sheffield—DEPUTY-CHAIRMAN.
Admiral Sir R. SPENCER ROBINSON, K.C.B., F.R.S., Late Controller of Her Majesty's Navy.
THOMAS BINGHAM, Esq., Belsize Park Gardens, London.
JOHN GALLOWAY, Jun., Esq., (Messrs. W. and J. Galloway and Sons), Manchester.

SOLICITORS—Messrs. PAYNE AND GALLOWAY, Manchester.

AUDITORS—Messrs. CHADWICKS, ADAMSON, COLLIER, AND CO., London and Manchester.

BANKERS.

Messrs. SAMUEL SMITH, BROTHERS AND CO., Hull.
THE CONSOLIDATED BANK (LIMITED), Manchester.
Messrs. SMITH, PAYNE, AND SMITHS, London.

This company has been formed for acquiring the shipbuilding and engineering works of Messrs. C. and W. Earle, of Hull, and the business connected therewith, and for working and extending the same.

The business has been carried on for upwards of 25 years, with continuous success, and has during that period been enlarged to meet the increased demand arising from the well-known and acknowledged excellence of the ships and engines constructed by the firm. The reasons for the disposal of the business are the recent death of Mr. Charles Foster Earle, and the serious illness of the only surviving partner, Mr. W. J. Earle. The terms of purchase are unusually favourable, and a very considerable portion of the purchase money is payable by nine annual instalments, bearing interest at 4 per cent. per annum. The land at the ship-yard is freehold, and comprises about 39 acres, and including the cost of forming, piling, &c., has been purchased at less than 5s. per acre, which, at the moderate estimate of 20 years' purchase, is equivalent to an annual ground rent of 24d. per yard.

The buildings, machinery, tools, and works in progress will be taken over by the company at a valuation, as between an in-coming and an out-going partner. The works are most advantageously situated on the banks of the Humber, with deep water sufficient to launch the largest iron-plated ships of war. The actual invoice value of the ships and engines, and work done during the last three years has been upwards of £250,000 a year, and it is estimated that the turn over of the new company, including ships of war, will very largely exceed that amount.

The terms of purchase by the company include the taking over the agreements mentioned at foot, by which the company will acquire the entire business, buildings, machinery, tools and stock, including books, plans, and models, and also the assurance of a considerable amount of foreign orders and new connections.

Mr. R. J. Reed, C.B., late chief constructor of Her Majesty's Navy, recently completed the works, and in a letter to Mr. David Chadwick, M.P., reported as follows:—

"The shipbuilding means are very good and very extensive, and quite capable of turning out a considerable increase of work beyond that at present in hand."

The engine factory is less extensive (in proportion), and not so well supplied with tools and appliances; but would lend itself very readily and economically to great improvement and extension.

The site of the works, and the character of the adjacent river, are all that could be desired, and entirely free, therefore, from that great disadvantage—want of deep water—to which so many large shipbuilding establishments are subjected.

The ship water dock is very near and accessible.

On the whole, the nature and circumstances of the work are all in favour of a very extensive production, both of mercantile and of war ships.

Since the above communication, Mr. Reed has been requested to become the Chairman of the company, and to take the management of the business for a period of five years, and has agreed to do so.

The whole property, estate and business, including materials and contracts in hand, will be transferred to the company with any addition or profit; and the total charge to the company for its establishment, including brokerage and agency, has been fixed at 1 per cent. on the subscribed capital, in addition to the legal, printing, valuation, and other strictly necessary expenses.

CONTRACTS ENTERED INTO ON BEHALF OF THE COMPANY.

First.—Between William Joel Earle of the one part, and David Chadwick, M.P., for Earle's Shipbuilding and Engineering Company (Limited), of the other part, and dated September 11th, 1871.

Second.—Between David Chadwick, M.P., for Earle's Shipbuilding and Engineering Company (Limited), of the one part, and E. J. Reed, C.B., of the other part, and dated September 13th, 1871.

Further particulars, and copy of the Articles of Association and of the contracts above mentioned, may be seen on application to Messrs. CHADWICKS, ADAMSON, COLLIER, AND CO., 65, Moorgate-street, London, and 64, Cross-street, Manchester.

THE SUBSCRIPTION LIST will be CLOSED on or before WEDNESDAY next, the 20th September instant.

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—Wm. Phillips, Sept. 14: The lode in the 103 west has a little improved in the past week, and is now looking very promising. We shall take down the lode in the different other levels, and give a full report next week.

BLARN CARLAN.—T. Kemp, Sept. 13: I went over this mine yesterday, and beg to hand you the following report:—The 20, west of shaft, is being opened in a large lode; the north, or hanging, side is still carrying a leader of muddle; the other portion of the lode is killas and friable spar, strongly spotted with lead ore. I consider the lode at this point as having a very promising appearance, and from indications we ought to cut into a good bunch of lead ore presently. In the 20, east of the shaft, the lode is chiefly composed of killas, intermixed with a little spar, with occasional spots of ore; the ground in this bargain is rather stiff for opening, and the men are making but slow progress—however, the end will be urged on as fast as the nature of the ground will admit, so as to get under the rich run of ore ground gone down from the upper levels. The slope over the 10, to the east of the shaft, is still looking well, and is worth 2 tons of ore per fathom. The slope nearer the shaft, in the back of this level, is worth from 15 to 20 cwt. of ore per fathom. The slopes in the back of the adit are not looking quite so well, but worth on an average from 18 to 20 cwt. of ore per fathom. No other change. The surface work, including dressing, &c., is being pushed on with all possible energy.

BLUE HILLS.—S. Bennetts, A. Gripe, Sept. 9: In the 66, east of Letcher's, no lode has been broken since last reported on, nor is there any change to notice in the 30 east. The 13, east of Follyear, on Wheel Betsy lode, is worth from 61 to 71 per fm. The winze below this level is down on another fine gossan, which is not yet cut through; this is the fourth heavy winze within 3 fms. The lode in Wheel Joy shaft continues satisfactory, and worth 151 per fm.

BOG.—Wm. Nancarrow, J. Lean, Sept. 13: There is no change taken place worthy of remark since last report, the various points of operation being in a satisfactory state of progress.

BRONFLOYD.—Thomas Kemp, Sept. 13: No. 3 Shaft, North Lode: Fair progress is being made in sinking this shaft from the 84 to the 100 fm. level, which will be pushed on with all possible energy. The lode in the 84, to the west of winze, continues to look well, and is yielding fully 2½ tons of ore per cubic fathom. The slope under the 62, and to the west of winze, is worth 2 tons of ore per cubic fathom. The slope over the back of the 62, and to the west of the 52, is worth 2½ tons of ore per cubic fathom. The tribute pith in the back of the 52 is producing 10 cwt. of ore per cubic fathom. We are getting on fast with levelling the ground west of the buddle floors, and shall commence the wheel-pit for the power to drive the wire tramway on Monday next.

BYRNABOR.—G. Spargo, Sept. 13: Since my last we have completed the forking of the water, fixing the balance-bob, &c., and are going on sinking satisfactorily. At the end of ensuing week I expect to commence cross-cutting the lode, and also continue the sinking to the 32 fm. level. The lode in the shaft is improved on the north part, but shall be able to say more as to its value when cross-cut. We shall go on as fast as possible with all points in operation, and will report as soon as anything important occurs.

BUDNICK CONSOLS.—J. Rawlings, Sept. 14: The lode in the 15 is 1 ft. wide, composed of spar and peach, and the ground is better for driving. In the 22 the lode is 2 ft. wide, composed of capel and peach of no great value. Driving east of the footway shaft the lode is 3 ft. wide, with every indication of a bunch of tin near at hand. The tribute ground, on the whole, is looking better, and if we have breakage with the machinery, we expect we shall be able to meet the cost this month. We are driving three kindly ends, and if we should cut another bunch of tin similar to those we have had here we shall be in a dividend position at once.

BWADRAIN CONSOLS.—R. Northey, Sept. 11: The lode in the 55 fm. level west is 5 ft. wide, good saving work. The lode in the 45 fm. level west is disordered by a cross-measure of unproductive ground. The lode in the 35 is 1 ft. wide, and looking promising for lead ore. I do not see any change in the deep adit level at Dolfwar. The slopes throughout the mine will yield about their usual quantities of ore. All the machinery is working well, and we are making good progress in timbering the new shaft.

BWLICH CONSOLS.—R. Northey, Sept. 12: The lode in the rise in the back of the 70 is 4 ft. wide, saving work. The slopes in the back of the 70 fm. level are worth on an average 15 cwt. per fathom. The lode in the 60 fm. level is 3 ft. wide, composed of quartz, killas, and a mixture of lead ore. The slopes in the back of the 60 fm. level are worth 18 cwt. per fathom. The lode in the 50 fm. level is 3 ft. wide, and worth 10 cwt. per fathom. The slopes in the back of the same level are worth 17 cwt. per fathom. All other points of operation are without change since I last reported.

CALCOPHANY.—Richard Pryor, John Davey, Sept. 12: The lode in the 100 driving east and west of the cross-cut, continues much the same as reported last week. The ground in the 100 cross-cut, driving north of the engine-shaft, is improving in its appearance, and showing indications of becoming more favourable for progress.

CASTLE GATE (Tin).—T. Parkyn, Sept. 14: Since my last report we have cleared the adit still further south, and have found several branches of tin dropping into the lode we first intersected, called Brenton's lode. I should remark here that this lode is 2 ft. wide, containing good work for tin, and the depth is not more than 6 fms. below the surface, and these branches of tin will fall into Brenton's lode about 15 fms. under the adit. I am pushing on the adit still further south as fast as possible, as we have other lodes I want to reach—in fact, there are over 20 lodes in the set, and from the surface operations considerable quantities of tin must have been raised, and we are now close upon Duck's pool lode. I have put the men to drive around an old shaft to avoid using timber, &c., and I fully expect to reach the lode next week. From what I have already seen of this mine I feel quite confident you have a most valuable mine. The lodes are embedded in killas near the granite, and in a splendid tin district. By next week I shall be able to say where the best position for the engine, stamps, dressing-floors, &c., should be. I want first to see two or three other lodes, so as to know their size and the course they are taking, &c. I beg to say that good returns of tin can be made here as soon as the stamps are set to work, as large quantities of rich stuff will be laid open by this adit, and by sinking 20 fms. below the adit the supply of tinstuff will be inexhaustible.

CATHEDRAL.—J. Michell, Sept. 14: Houston's Tin Lode: We are still driving as fast as we can in the adit level, east of footway shaft, and the lode maintains its size (7 feet) and character, and producing some good work for tin, in clearing the adit towards Doctor's shaft these last few days we have made better progress than for some time past, and from present appearances we shall soon make a finish of it, when we shall commence to sink the shaft referred to, and without a doubt very good returns will be made from this point. The masons are getting on very well with the building, and I hope we shall soon put the engine to work.

CONCORRE.—W. Jones, Sept. 13: The 18 fathom level, middle, and south slopes are yielding well, and of ordinary quality. The ore which we are dressing from the 18 and 25 fm. levels, at Field's shaft, is of a superior quality; we are breaking in a large way. There is no change to observe in the slopes in the 25 fathom level, at Tracey's shaft. We have now on surface some tons of the rich grey ore from the 25 fm. level, at Berry's shaft; our work progresses well, and is in profitable ground. The slopes in the 35 fm. level continue in a very satisfactory state. We have a strong lode in the drive in the 45 fm. level; the copper percentage is apparently high. We have been during the past week drawing regularly from the 55 fm. level—a kindly lode. Killmacoe Blende Ore: We are still putting down our work, preparatory to the second stoping. We are steadily dispatching to Wicklow for the completion of the present cargo.

CRENVER AND WHARF ABRAHAM UNITED.—W. Kitto, Sept. 11: Sturt's Engine-shaft: We shall send down the bob and fix it in its place in the 180 this week. In the 205 end west the lode is the same as last advised.—Crenver Shaft: In the 130 end east the lode is 2 ft. wide, producing saving work to dress. In the rise in the back of the 180 the lode is 2½ ft. wide, worth from 181 to 204 per fm. At Kelly's engine-shaft, sinking below the 220, the sunmen are leaving the lode standing, and will take it down at the end of the month, as ascertained its value. No alteration in any other part of these mines since last advised.

CWM ERFIN.—Sept. 12: The lode in the slope in the bottom of the 45 is on an average 6 ft. wide, and will turn out from 7 to 8 cwt. of lead ore per fathom. The 45 west, on the counter lode, has been suspended for the present, and the men gone to stopel in the bargain before mentioned. We have a branch or part of the lode still going off in a north-west direction; it is about 6 in. wide, but of no value; we believe that it will lead to the same thing out in the 10 cross-cut, and this being poor at the intersection is the reason of our abandoning it until something better is seen. Good progress has been made in the rise over the back of the 45; the lode in the same is 6 in. wide, composed of spar and a little carbonate of lime, spotted with blende. In the cross-cut driving south, the 45, nothing has been seen. In the slope in the back of the 45 fm. level, 90 fms. east of the drawing-shaft, the lode will yield on an average about 8 cwt. of lead ore per fathom. In the 32, going west of Taylor's shaft, the lode is 1 ft. wide, composed of killas, sugary-spar, or decomposed quartz, spotted with silver-lead ore—a very kindly end, and might improve at the blast of a hole. It is going back into virgin ground, and parallel with the most productive parts of the Goginan Mine. In stripping down the sides in the bottom of the deep adit level we are meeting with some strong branches of lead ore, and I think the men are earning a fair living in their tribute. There is no alteration in any other part of the mine to remark. The machinery is all in good working order, and a fresh bunch of ore would again set us all right.

DEERPARK.—J. Bucknell, Sept. 14: We are continuing to drive west on the north lode. The ground is very favourable, and we are making good progress. I have dilled the lode that the adit has been driven upon in the adjoining ground, and find that it forms a junction with our lode that has been opened upon in the roadway.

DRAKE WALLS.—Thomas Gregory, Sept. 14: The branches in the 60 fathom level west, on south part, are worth from 101 to 121 per fathom. The branches in the 65 cross-cut south are worth 111 per fathom, and are promising for an improvement. In the 70 fm. level west we are opening south-west on some good veins of tin. From appearances we are of opinion the main branches are yet before us in this direction. We have no other change to report since my last.

EAST BOTTLE HILL.—J. Eddy, Sept. 13: New Shaft: Since reported on last week we have sunk 4 ft. 6 in. through a beautiful channel of ground for mineral, and is of much the same character as was found about this same lode west in the adjoining mine, Old Bottle Hill, where their richest deposits of both tin and copper ore were discovered. We are now down 11 fms., and judging from the underlie of the lode we may expect to meet with it at the shaft in 4 or 5 fms. further sinking.—North Tin Lode: The lode east, in shallow adit level, is still holding its size, being about 3 feet wide; finding this lode to be equally rich for tin in the back and bottom of this level as in the end we are driving the deep adit level east, and in a few fathoms further we shall meet with this about of tin gone down in the level above.—South Cross-cut: On Saturday last we cut through a branch about 4 in. wide, and broke some good stones of tin; we cut through a branch in the lode, and when the droppers carry tin we have every reason to expect to find the south lode good when cut. All other operations are going on favourably.

NEW CLIFFORD.—Joseph Michell, Sept. 14: I have put a full party of men to drive east on the lode recently intersected in the north cross-cut. In the 72 the lode is from 6 to 7 ft. wide, and of a very strong and masterly appearance, and I have very good reasons for believing that an important change for the better will soon take place, when you shall be advised of the same.

EAST DARRIN.—Sept. 12: In the 116 east the lode is 1 yard wide, promising saving for dressing of a low quality. In the 104 east the lode is 4 feet wide, composed of blue clay-slate, carbonate of lime, and lead ore, producing the latter about 16 cwt. per fathom. In the three stopes over the back of this level the lode is on an average about 5 feet wide, little improved for lead, and yielding 1½ tons of ore per fathom. In the 92 east the lode is 1½ yard wide, composed of clay-slate, carbonate of lime, and at present unproductive for lead. In the stopes over the back of this level the lode is about 1 yard wide, producing about 18 cwt. of ore per fathom. In the stopes over the 80 fm. level, on south part of the lode, the lode is 1 yard wide, producing about 1 ton of ore per fathom. The tribute pitches throughout the different levels (five in number) still continue to yield their usual quantities of ore. At Skinner's shaft, under the 68 fathom level, the ground is composed of a light clay slate, favourable for sinking. At New engine-shaft, at Blaneview, sinking under the 40 fm. level, the ground is composed of a light clay-slate, favourable for sinking, and men are pushing on with spirit. In the 40 fm. level, west of new shaft, the lode is about 2½ yard wide, composed of light clay-slate, carbonate of lime, and lead ore, yielding from 10 to 12 cwt. per fathom, and looks promising for further improvement. In the cross-cut north of New Pool there is no change to notice. Our drawing and dressing, with other surface work, are being carried on regularly, preparing ore for our next sampling.

EAST LILLYNOG.—E. Pascoe: Setting Report: The mine throughout looks remarkably well. Have not time to send a general report, as we are very busy erecting the crusher and preparing the dressing-rooms, and am anxious to get them and the buildings completed before the rough weather sets in. The deep adit cross-cut is let to drive south, by two men, stent 2 fms. or to cut the lode, at 60. per fm. No. 4 level to clear and timber on the south lode, by four men, stent 6 fms., or to reach the borer-hole, at 45. per fm.; when this is done we commence to rise under the winze. No. 4 level north, to clear and timber on the north lode, by two men, stent the month, or to reach the forebrest. No. 3 level to clear and timber on the north lode, by two men, stent the month, at 50. per fm.; in clearing this level last month we discovered a bunch of ore 3 in. wide, apparently in new ground; this is over the level I proposed driving. I think we have fully 100 fms. from this place to the mouth of the level; this is a very kindly piece of ground, and on the same lode as the winze out of which the large stones of ore were raised. I have two men preparing to drive; in clearing we have found some good lumps of ore. No. 1 stop, in No. 1 level, has failed in consequence of the blue shale; I have put two men to rise through the shale, as I believe the lode will make again; stent 6 fms., at 60. per fm. In No. 2 stop, west of No. 1, the lode to be undercut as directed, by two men, at 50. per fm. No. 3 stop, on south lode, east of rise, by four men, at 95. per fathom; this stop is looking exceedingly well, and seems to be extending east over the dead ground in the back of No. 1 level; it is worth fully 2 tons per fm. No. 1 adit level I have let to six men, to cut through the lode close to the present end; this is a very kindly lode. I hope to commence sinking the winze in a short time. I have set the end to drive west on the south lode, in No. 1 winze, to six men, stent the month, at 60. per fm.; this end is worth 10 cwt. per fathom. The end to drive on the middle lode, in No. 4 level, to four men, stent the month, at 60. per fm.; this is a strong lode, and very kindly for yielding blende and lead, but not sufficient to value; the lode is fully 4 feet wide, and appears to be the champion lode. I hope soon to have a good course of lead in this end.

EAST POOL.—W. S. Garly, manager, J. Maynard, J. Ho-kinz, Sept. 11: Great Lode: The engine-shaft is sunk 3½ fms. below the 180, and the sumpmen are now employed in casing and dividing the shaft below the 170. We hope in a few days to draw from the 180. The 180 is driven east of the cross-cut 14 fms., and is worth 1½ tons per fm. The 180 is driven west 15 fms., and is worth 2½ tons per fathom. One stop in the back of this level is worth 24½ per fm. These ends and stopes are still free from wolfram. The 170 is driven east 46 fathoms, and is worth 16½ per fm. The 170, west of the cross-cut, is worth 12½ per fm. There are four stopes in the back of this level—two east of the cross-cut are worth 1½ tons per fm. The two west of the cross-cut are worth 1½ tons per fm. The south of the 160 level is 2½ fms. wide, and has intersected some branches containing tin, and seems as if it were approaching a lode. We have commenced a winze below the 170, about 23 fms. west of the cross-cut from the engine-shaft; it is down about 2 fms., and is worth for tin 20½ per fm.—Engine Lode: The 150, west of cross-cut, is worth for tin 20½ per fm. Two stopes in bottom of the 160 are worth for tin 20½ per fm. each stop.—South Lode: The 150 is driven west of the south cross-cut 11 fms., and is worth for tin and copper 12½ per fm. The 140, driving south from the engine lode to intersect the south lode, is in about 6 fms., and in ground favourable for tin and copper 18½ per fm. The western cross-cut 35 fms. wide, and is worth for tin and copper 18½ per fm. The winze over the 160, sinking below the 100, is down about 4 fms.; the lode in it is small and poor. The 60, 10 fms. west of south shaft, is driven about 7 fms.; nothing yet cut in it of any value. The three stopes in bottom of the 130, and the tribute ground in the upper levels, are much the same as last reported. The house for the new winch is completed, and the engine hoisted in, but being obliged to have two of the heaviest parts of the machinery outside connected with the drawing gear rest, from circumstances beyond our control, we have not been able to work so soon as was anticipated, but hope in a short time to have the entire in good working condition.

EAST RHYNALLO.—J. Dunkin, Sept. 13: The deep level, on Rhynallog engine lode, continues of the same character and size as reported last week. The deep level, on new lode, is getting much larger as we get more into the hill, of a very promising appearance, composed of gossan, carbonate of lime, and clay-slate. I believe it will produce lead in a very short time.

EAST TERRAS.—James Harris-James, Sept. 14: The new lode referred to in my last is now producing rich tin stuff. All the other points of operation are much the same as when last reported. Our preparations are being made to bring in the great adit at the present speed.

EAST WHALE.—G. R. Odgers, W. Bennett, Sept. 9: We cannot see any change in the lode at the different places in the mine since we wrote you on Wednesday last.

—G. R. Odgers, W. Bennett, Sept. 13: Fair progress is being made with the driving of the 120 cross-cut north. We hope by Monday next to have the skip-road at the engine-shaft complete for hauling from the 75. The lode in the 85 east is fully 2 ft. wide, producing a little copper ore, worth about 1 ton of ore per fm. The lode in the 75 east is 2½ ft. wide, worth fully 3 tons of ore per fathom, with a little tin, and seems as if it were approaching a lode. In the 65 east, as when last reported, worth 7 tons of copper ore per fathom for 10 ft. long. The stopes above this level will produce 2½ tons of copper ore per fm. The lode in the 65 east is not looking so well as last week, worth 1½ ton of ore per fathom. The stopes above this level are worth 2 and 2½ tons per fathom respectively.

EAST WHEEL.—R. Quentrell, Sept. 13: The lode below the 80 continues to open out just as reported at the meeting. The stopes in the back of the 80 is turning out a large quantity of stamping work.

EAST WHEEL MARY.—James Harris-James, Sept. 13: We have cleared the east shaft, and can go into the end, which is beyond the shaft about 25 fms., but not yet cleared out. This will be accomplished in a day or two, when I will forward you a full report. The lode appears in two branches, with a horse between them about 18 in. wide, both the branches producing tinstone of low quality.

EAST WHEEL SETON.—Joseph Vivian and Son, Henry Arthur, Sept. 14: Cartwright's Shaft: This shaft is now 5½ fms. below the 34, where the lode is 3 ft. wide, and presents a favourable appearance. The sink in the bottom of the 34 west produces about 3 tons of copper ore per fathom. The tribute pitches are without alteration. Bassett's Engine-shaft: This shaft is now about 4½ fms. below the 46, where the lode is without change since the last report. In the 46 east and west there is no change worthy of notice. Flat-roof Shaft: In the 44 west the lode has improved, and is now producing good stones of copper ore.

EXCELSIOR.—G. Rickard, Sept. 14: In cutting the pit at the whim-shaft, which is now completed, we have passed through several branches, each containing tin, and as I am not satisfied that we have got the main part of the lode, I intend driving a few feet further south in order to prove this point before starting a level west. The character of the ground passed through is all that can be desired for the production of large quantities of tin. I look forward to the prospect of the prosecution of the drive; west under the old main workings, believing that success will attend this point of operation.

FRANCO CONSOLS.—Telegram: Sept. 14: We have just received the following:—Great discovery in this mine, the miners informing me that it is the best lode ever seen in the old mine. We would remark that in the old mine they had courses of copper ore, worth 350½ per fathom.

—William Newton, Sept. 15: Mine looking well generally, but the improvement referred to in the telegram is of great importance, and is not another practical and independent discovery, for the reaction of the shareholders, to examine and report on it. In a day or two I will send you my report.

GAWTON COPPER.—G. Rowe, G. Rowe, Jun., Sept. 9: The ground in the 105, driving east from King's engine-shaft, is still of good description, and our progress very satisfactory. The lode in the 95, east of said shaft, is looking exceedingly well, yielding over 8 tons of good quality ore per fathom. The lode in the 82 east is producing good stones of ore. The lode in the 70 east is 6 ft. wide, yielding 1 ton of ore per fathom. The lode in the winze sinking below the 70, is worth 10 tons of ore per fathom. The lode in the shaft in the bottom of the 70, east of William's shaft, is worth 5 tons of ore per fathom. All other points of operation are without change.

GLASGOW CARADON.—W. Taylor, Sept. 12: Harvey's Lode: In the 78 east we are still driving by the side of the lode in very favourable ground. We have not yet cut anything in the cross-cut south at this level. We have resumed driving the 65 east; this is to get under the lode recently cut by the shaft cross-cut; the ground in this end is favourable, and the lode producing stones of ore, which I expect will improve as we approach the cross-cut. We have made a communication from the 52, east of the western part of the mine, to the 62, west of shaft cross-cut, proving these to be two distinct lodes at this point. We are now extending the main cross-cut to cut the south lode there, which we hope to do in a week. We shall then drive east and west on it; at the same time the former 52 east will be continued to meet this main cross-cut. The lode in the 52 fm. level end is worth full 14½ per fathom. We have commenced a rise in the back of this level; the lode is worth 12½ per fathom—ground easy. We purpose rising up to make at the 45 here, and ultimately communicate with the 45 from the shaft. The stopes on this lode vary in value from 6½ to 14½ per fathom, and ground generally easy.

GORSEDD AND CELYN LEVEL.—Sept. 13: The rails for the adit level have arrived, and are of excellent quality; the men are now engaged laying them, and I hope they will complete the operation by Saturday evening. The trucks are ready, so no delay will occur; our progress for the future, therefore, towards Gorsedd will be much quickened, and the driving accomplished at less cost. The lode in the end is a very fine one, and a large stream of water is issuing therefrom, this clearly showing that the workings are influencing the adit level are also turning out a good quantity of lead ore, and the mine throughout doing well.—Dressing-floor: We are treating a large quantity of stuff, and making good progress in preparing another batch of ore for market. Our water supply is good.

GREAT LAXEY.—James Barkell, Sept. 13: The shaftmen have completed the casing and driving of the engine-shaft to the 253 fm. level, and would have commenced driving north and south, but they have had to assist in getting down castings and other heavy work for the flat-rods now being put in the 200 fm. level.—220 Fathom Level, Driving North: The lode in this end is producing a little lead and blende, and is letting out a greater quantity of water than usual, but as yet we cannot see any decrease in the 210 fm. level.—210 Fathom Level: The lode in this end has recently become small, and we have put the

men to cross-cut both to the east and west side of the level, believing that there is more of it standing in both directions. The lode in the sump coming down from the 200 fm. level (which sump is several fathoms in advance of this 200 end) is worth 80½ per fathom.—200 Fathom Level: We have not yet holed the rise going up above this level to meet the sump coming down from the 190, but the men are now working very plain, and we expect to holed shortly; the lode both in the rise and in the sump is worth 70½ per fathom.—190 Fathom Level, Driving North: This end is worth 60½ per fathom.—180 Fathom Level, Driving North: The part of the lode we are driving on is worth about 40½ per fathom. We shall shortly commence to shoot off the remaining part of it to prove its full width and value.—165 Fathom Level: The lode in the rise above this level is worth 60½ per fathom, and the ground is more favourable for progress. The price for rising last month was 36½ per fathom, and this month 22½ per fathom. The lode in the 155 end, driving north, is producing a little lead and blende, but it has not improved according to our anticipations. The sump sinking below the 145 is still holding good; lode worth from 60½ to 60½ per fathom.—Dumell's: The engine-shaft sinking below the 170 fm. level is worth 120½ per fm., and the 170 end, driving south from shaft, is worth from 60½ to 70½ per fathom.—155 End North: We have holed this end to the sump sunk down from the 140, and this holed has greatly improved the ventilation in the shaft and in the 170 fm. level. We shall now be able to shoot off the remaining part of the lode in this 155 fm. level (which has been left standing for many fathoms behind the end) and prove its full width and value, and shall also be able to commence stopes in the sole of the 140, where the lode is fully 14 ft. wide, and worth 90½ per fathom.—140 End, Driving North: This end has improved since last report, and is worth from 60½ to 60½ per fathom, and the sump coming down from the 125 is worth 60½ per fathom. When this sump is holed we shall resume the driving of the 125 north.—110 Fathom Level: The trial cross-cut in this level has been driven east 10½ fathoms, and nothing discovered in it until this week. We have now come into a small branch or vein about 2 inches thick, producing lead and blende, and as far as we can at present see, it is running about parallel with the old lode, and has about the same underlie, and from the changed nature of the ground, we expect still to cut into something better. A good discovery in this cross-cut would greatly enhance the value of the mine.

GREAT NORTH LAXEY.—R. Rowe, Sept. 13: The 110 driving north is still in a good-looking lode, 3 ft. wide, and worth 1 ton of lead per fathom. The sump sinking below the 90 continues to be worth 2 tons of lead per fathom. The stopes in the roof of the 90 are worth 1 ton of lead per fathom. I hope shortly to sample another parcel of ore—40 tons.

GREAT RETALLACK.—G. R. Odgers, J. Harris, Sept. 13: The ground is very favourable for driving through this great lode at the adit level. Since we first intersected the capels we have driven 40 ft. without meeting with the south wall. In the last 12 ft. we have met with occasional stones of lead; there is not so much water flowing from the end as there was last week.

GREAT ROCK.—Kemp, Sept. 14: The engine-shaft is in a regular way of sinking. The 23 fm. level, east of engine shaft, is looking very favourable indeed for an improvement, producing some very good stones of lead, and the ground seems to be identical with that in our upper levels, where we got our best ore. I am looking forward for something good in this level, for it has very much improved the last day or two. There is no alteration in the winze in the bottom of the 12 fm. level. We have entered the lode south in the deep adit level; the lode is 4 feet wide at the point intersected, composed of clay-slate, with a small portion of quartz, and spears of lead. I have put the men to drive east on it, and hope in a few days to be able to give more news respecting it.

GREAT WESTERN.—Edward Rogers, Edmund Rogers, Sept. 13: Fisher's Lode: Michell's engine-shaft is down 5 fms. 4 ft. 6 in. below the 40; the ground is not so favourable for sinking. In the 40, driving west of the shaft, the lode is 4 ft. wide, worth 6½ per fathom. In the rise in back of this level, east of the shaft, the lode is without alteration, being worth 10½ per fathom. The winze in bottom of the 30, east of the shaft, is down to water, and therefore suspended. The lode at the stopes west of this winze is worth 20½ per fathom. At the flat-roof discovery the men have been engaged putting the pitwork in order, which has completely stopped the lode, and are sinking a new shaft, 4 ft. below the 30; the lode is without alteration, worth 4½ per fathom. In the 10, driving west of Jones's shaft, the lode is 1 ft. wide, and passing through ground that will be taken away on tribute.—Middle Lode: In the 40 we have completed cutting the pit at Curtis's shaft, and commenced driving west at this level. The lode at this point is worth 3½ per fathom. In the winze in bottom of the 30, west of the shaft, the lode is worth 18½ per fathom. In the back of the level, east of the shaft, No. 1 stop is worth 20½ per fathom, and No. 2 stop 15½ per fathom.—South Lode: In the 10, driving east of Willis's shaft, the lode is 1 ft. wide, worth 2½ per fathom. In the 10, driving east of Willis's shaft, the lode is 1 ft. wide, worth 2½ per fathom. In the adit end west there is a little improvement; the lode is 1 ft. wide, worth 3½ per fathom.—North Lode: In the adit end, east of the eastern shaft, there is no alteration; the lode is worth 2½ per fm.

GREAT WEST CHIVERTON.—John Nancarrow, Camborne, Sept. 11: No. 2 lode is improved in appearance; it is now 2 ft. wide, and looks promising for the production of lead. The end driving on No. 3 lode has got into blue ground which is most congenial for lead; the lode is large, carries a strong flow, and altogether looks better than it ever did before.

GREAT WEST CHIVERTON.—Sept. 12: The new end south is getting wider as we drive on the vein, being now about 8 ft. wide, and I presents much the appearance that it did further back when we had it so rich, now producing about 12 cwt. of ore per fathom; set to four men, at 3½, 7½, 6½, per fathom, including cutting room for arching. The stopes above is yielding from 16 cwt. to 1 ton per fathom; stopping at 27½, per fathom—set to two men. The end south, on the cross vein, is worth about 14 cwt. of ore per fathom; set at 4½, 2½, 6½, also to two men. The working in the old vein is yielding about 8 cwt. of ore per fathom. Annie's vein is not working at present, but I shall have two men to stand on Good Fortune shaft, and are putting on the crusher. At Vachulas deep adit, driving west, we have taken down the lode; it is about 10 inches big, composed of spar, sulphur, blende, and saving work for lead ore.

LEEDS AND ST. AUBYN.—J. Curtis, Sept. 13: Wilson's engine-shaft is near the 30 fm. level; 20 in. wide, worth 15½ per fathom. In the 20 west the lode is 1 foot wide, worth 3½ per fathom. In the 20 east the lode is 2 feet wide, worth 4½ per fathom. The stopes in the back of this level are worth 2½ tons per fathom. The stopes in the back of the 10, west of Wilson's shaft, are worth 4½ per fathom. In the 10, east of Kendall's flat-roof shaft, the lode is 2½ feet wide, worth 2½ per fathom. In the 10, east of Kendall's flat-roof shaft, the lode is 2½ feet wide, worth 2½ per fathom. At Bastian's flat-roof shaft, the lode is 6 in. wide, worth 5½ per fathom. In the 17, east of Bastian's shaft, the lode is 6 in. wide, worth 2½ per fathom. I purpose selling tin to morrow, about 4½ tons. On the whole, the mine is looking much the same.

LYNCLYD.—J. Lester, Sept. 7: In sinking the main shaft on Redfern's lode we came into good lead ground, which is producing good stones of lead; the lode improves very much in going down, which shows plainly that we are near the junction. The Rauter's lode, 25 yards north, I shall have ready for two men to drive on it.

J. Lester, Sept. 8: I am much pleased to report to-day that in sinking the shaft on Redfern's lode we came into good ground, which is producing good stones of lead; the ground improves in going down, which shows plainly that we are near the junction. I shall have ready to drive next week east and west.

J. Lester, Sept. 14: Since my last report I am glad to say that Redfern's shaft is improving in sinking, producing good stones of lead. In driving east on Rauter's lode the end is 4 ft. wide, composed of lead ore, worth about 15 cwt. of lead per fathom. In driving a few yards further I expect to meet a junction of lead ore, which will have no doubt, by the appearance of the ground, will produce a large body of ore.

MINERA UNION.—J. Nichols, Sept. 14: Low's Shaft: The lode in the 60 yards level north yields a little lead, but not to value.—Boundary Shaft: The lode in the 100 yards level, south of the winze, is 2 ft. wide, composed of spar and clay, with occasional good stones of lead. I am daily expecting an improvement in this end. The pitch in the back of the 80 yards level north is worth 1 ton of lead per fathom.—Brabner's Shaft: The pitch in the bottom of the 80 yards level is worth 1 ton of lead per fathom. No other change to notice.

NEW CENTRAL SNAILBAGH.—J. Nichols, Sept. 14: The mine has no change of importance in the old mine since my report for the general meeting, but in the 30 yard level, at Mytton Dingle, the lode has undergone a decided change for the better, and is now worth from 6 to 7 cwt. of ore per fathom, and likely to further improve. The dressing at the old mine is now proceeding regularly, and we shall soon have a parcel of ore ready for market.

NEW BELDON.—J. Barrow, Sept. 4: Since my last we have driven the cross-cut on the north side of the Standalone vein level; nothing of any importance discovered. The lode in the 100 yards level, in about 6 ft. In the former part of last week I had those cross-cut men filling in and forcing the crush on the Beldon old workings. To-day I have the same men drawing water out of the sump that is sunk in the Fellgrove vein to test if the water is now quite manageable by hand; if so, we could clear out the sump, and see the vein at the High Grit sill; at this place I am informed by one of the men that was at the sump or sinking when the water beat them that the vein is good for ore. I will let you know at what rate the water rises in 24 hours after this day's drawing is made. In the south cross-cut since my last we have cut two backs, bearing west of sump; at the last one, cut to-day, we get a strong feeder of water; the ground continues hard, and bed dipping to the south. The Old Sheldon level, in Beldon level, is harder for driving; vein from 16 to 18 in. wide, with occasional pieces of ore, but not to value; we have not yet holed into the old workings. I will on Wednesday have timber put into the middle sump, so that two men can get down to work and hasten the communication.

NEW BELDON.—J. Barrow, Sept. 11: There is no change to report on Standalone vein on the north side of Reddon shaft. The men have only worked one round of shifts at the north cross-cut since my last, I have then employed at Beldon old Sheldon vein sump. In the cross-cut for the Fellgrove vein the sill continues hard for driving; the back bearing west of south named in my last, and at which we cut water, was cut off by another back crossing at about right angles with the forebrest; a little red softness was at the cross-back and small particles of sulphur in the stone close to it. The bed is altered with the back, and is, I think, thrown up on the south, but this will prove in a day or two, when the men are taking up their stopes or bottom part of ground. On Thursday last I let another fathom to drive, at 8½, 10½. I am of opinion that the points and backs where we have had the water will prove to be strings of the Fellgrove vein; a number of them are in the 10 fm. level, south from the Fellgrove branch. I will write more on this as early as possible. The Beldon level at Old Sheldon vein has been hard for driving since my last; the last fathom let at 8½. There are spots of ore in the vein, but nothing of value; the vein is increasing in width at the top part of the drift, and has the appearance of becoming easier to drive. The level forebrest is, we think, just coming under the low sump, and is undoubtedly deeper than the said sump foot. From 12 o'clock on Saturday till 3 o'clock on Monday morning the water has settled 6 inches in the sump, and the level has fallen 6 inches from Beldon, and to-day am drawing the remainder of the water out from the low sump; they have to draw it to the top of the middle sump to get clear of it. There is about 2 ft. of water to clear out, then I expect it to keep clear. The water has run down the middle sump from the top level and accumulated in the low sump; as soon as the water is cleared out we shall commence to sink at the low sump foot to hole into the level, and

as soon as I can will set the level men on to rise and meet them. I calculate by the sound from rapping there is two fathoms or more between the sump foot and level roof. We cannot hear a shout from either side, but when in the low sump can hear the tram when it is being run from the forebrest of the level. We shall hole as we possibly can, according to the depth of sump, and when we have to sink there is going to be about 25 fathoms thick of grime-sill above the Beldon level.

NEW CROW HILL.—T. Trelease, A. Kent, Sept. 12: We measured on Saturday at the 100 for last month's driving 5 fms. 1 ft. 9 in.; the same bargains were set at 55. per fathom, stent 2 fms. There is no change in the character of the lode at this point. We have taken the men from the 55 to open the western shaft, with the view of finding its proper underlie, and also of seeing in what state of repair it is now in. When this is done we shall be better able to deal with the hoiling of it. We require this shaft down in order to resume the sinking of the lode as seen in the winze below the flooken. This we think a very important point, as it is a most promising lode, and producing good stones of ore throughout.

NEW DALE.—R. Niness, Sept. 12: In consequence of the heavy rain that has fallen during the past week we have been able to do but little in the 75 cross-cut since my last report, therefore the distances stand much the same, but the water is out again, and the level cleared of the sand which was washed out with the water. I am pleased to inform you that Mr. Brown visited the mine on Saturday last, and after going into the courses or runs of ore ground, which we term "pipes," he suggested for the future that the pipe the new shaft was sunk upon be designated No. 1 last pipe, worked on No. 2, and the new pipe on Johnson's lode, No. 3. Refer to the plan, you will see as at once numbering the pipes in this way will more clearly define them. Mr. Brown also thought it wise to drive north on the eastern part of the large vein in the 75, at a proper distance (say, 5 fms.) from the cross-cut to sink to the run of ground that has carried the ore from surface down to a distance of near a quarter of a mile. No. 3 pipe, on Johnson's lode, is still disordered with a rider, but notwithstanding, is yielding some good ore; driving a short distance further will enable us better to judge as to the precise spot to cut it at a deeper point.—Folly Bank: The ground here continues very hard for driving, but congenial; 1 ft. only has been driven during the past week, but we are now approaching the ground containing the ore in the old workings above, which every effort will be made to reach as soon as possible.

NEW GREAT CONSOLS.—Richard Pryor, John V. Thomas, Henry Vail, Sept. 11: Setting Report: The 74 fm. level to drive west of Phillips's engine-shaft, on the south part of the lode, by six men, at 8½ per fathom; the part we are driving on is 6 ft. wide, and worth 20½ per fathom. To stop the back of this level, east of shaft, by four men, at 4½, 9½, per ton; the lode is worth 10½, per fathom. To stop the back of ditto, east of shaft, by four men, at 5½, per ton; the lode is worth 15½, per fathom. To stop the bottom of the 64 fm. level, west of shaft, by four men and two boys, at 6½, 3½, per ton; the lode is worth 10½, per fathom. To stop the back of this level, west of shaft, by six men and three boys, at 7½, 6½, per ton; the lode is worth 30½, per fathom. To stop the back of the 40 fm. level, west of shaft, by four men, at 10½, per ton; the lode is worth 12½, per fathom. To stop the back of the 30 fm. level, west of Thomas's shaft, by four men, at 6½, 6½, per ton; the lode is worth 20½, per fathom. To stop the bottom of the 20 fm. level, west of shaft, by three men, at 8½, 6½, per ton; the lode is worth 10½, per fathom. To stop the bottom of this level, west of shaft, by five men and two boys, at 7½, 6½, per ton; the lode is worth 10½, per fathom. To stop the bottom of this level, west of shaft, by one boy, at 6½, 6½, per ton; the lode is worth 10½, per fathom. To stop the bottom of the 10, west of shaft, by three men and one boy, at 6½, per ton; the lode is worth 30½, per fathom. We have communicated the winze from the 10 to the 20 fm. level, and at this point have set to four men and two boys, to drive south to cut through the lode, at 6½, per fathom, which, when ascertained its size and value, shall be fully reported on. We have also four men and two boys cutting through the lode at different places in the 40 fathom level. Our pay and setting passed off very satisfactorily.

NEW HEN DR.—Richard King, Sept. 11: We have now a full pair of pigs men sinking the new air-shaft in the hill, and they are making fair progress downwards; when this is communicated with the deep adit level we shall then be in a position to drive the deep adit a great deal faster and cheaper, consequently we shall cut the various lodes in a comparatively short time. This shaft will enable us when communicated, with air solars fixed, to drive almost any distance, and explore the various lodes that we shall cut. There is no particular change in the deep adit end since my last report; the lode is producing a little tin, and the ground is just the same as before reported.

NEW HEN DR.—Samuel Michell, Sept. 6: I find the ground in the cross-cut in the 30, north of Nicholson's shaft, has become more easy for driving, and the men are making good progress. The water continues to increase gradually. The horse-wheel was very much out of repair, and to save the expense of any additional hands to put it in order, I have taken two of the endmen to assist in doing so for a day or two, which is now complete for driving. In order to save the cost of drawing, we have filled the shaft below the 30 with the stuff from the cross-cut. The two men exploring the piece of ground west of the cross-cut, where the rich ore was found, are also making good progress. The shears now have been on Good Fortune shaft a party has offered to purchase, provided you feel inclined to sell it.

NEW VICTORIA (Ashburton).—Wm. Skeewis, Wm. George, Sept. 14: We shall commence the cutting of the road round the shaft for conveying the stuff to the plat from the eastern level by the end of this week, after which the men will be at once put to case and plank the shaft for drawing purposes preparatory to sinking, and also to remove the two drawing lifts between the 80 and 90, and to replace with a 14-in. lift. I observe no change in the 90 (south lode) worth mentioning. In the 66 east (south lode) we have taken down a part of the lode showing 7 feet in the end, the whole of which is strongly mineralised, and yielding occasional good stones of copper ore. We have to-day assayed several samples from the different levels, the whole of which show a small percentage of tin, out as yet not enough for valuing. The samples are all taken from the same perpendicular piece of ground, which it is reasonable to believe will increase in richness by extra depth, or by extension in driving.

NEW WHEEL TOWAN.—R. Pryor, Sept. 13: Setting Report: On Friday last we set the adit to drive west on the copper lode, by two men, at 6½, 10½, per fathom; the lode is 2 ft. wide, producing good stones of ore—in fact, of a more kindly nature than for some time past. The adit to drive west on the tin lode, by two men, at 7½, per fathom, in a lode producing saving work for tin, and promising a speedy improvement.

NORTH CROFTY.—Joseph Vivian and Son, William Thomas, Sept. 14: In the 220, west of Peterkirk's shaft, the lode is 4 ft. wide, producing low quality tinstone. In the winze sinking under the 208, 8 fms. in advance of the 220 end, and now down 3 fms., the lode is 4 ft. wide, and produces a little tin. In the 208 west the lode is 4 ft. wide, producing a little tin and copper ore.—South Lode: In the 196, west of cross-cut, from Praed's shaft, the lode is 18 in. wide, producing saving work for tin. In the winze sinking under this level, the lode is 6 in. wide, and the present end, the lode is worth 10½, per fathom. In the 208, east and west of cross-cut west of Praed's shaft, the lode is 3 ft. wide, and tinny throughout.

NORTH POOL.—Sept. 14: Ballarat shaft is now about 12 fms. 1 ft. below the 52, and still in a lode of fine character. Our machinery is working very well.

NORTH TAMAR.—John Goldsborough, Sept. 13: Operations were commenced on the 24th ult. The walls of the smith's shop are up, the timberwork of the roof will be completed to-day, and the masons commence roofing to-morrow. The sinking of Cowell's engine-shaft which we commenced from surface, is being forced on with all speed; good progress is being made. The shaft is calculated to take the lode 30 fms. below adit; taking the bearing of the lode where seen in the adit, judging from the same good results will be realised when intersected. The stratum is a light blue clay-slate, congenial for the production of large deposits of silver-lead ore, which is rich for silver, the richest ever raised in the parish of Beerferris. The making and fencing of the road leading from the main road to the mine is progressing satisfactorily.

NORTH TREKERRY.—Richard Pryor, Thos. Jenkin, Sept. 13: Tresider's Shaft: The lode in the 120, driving east of shaft, is 3 ft. wide, producing saving work for tin. The lode in this stop is 18 in. wide, and is worth 10½, per fathom. The lode in the 110, driving east of shaft, is 2½ ft. wide, and producing a little tin and copper ore—a promising lode. The rise in the back of this level, which is up about 5 fms., is being pushed on with all dispatch, in order to be communicated with the level above, which, when accomplished, will give good ventilation to these levels, and enable us to develop them with greater progress. The lode in the two stopes in the back of this level are worth respectively 2 tons of copper ore per fathom. In the 100, driving east of shaft, the lode is 18 in. wide, and is worth 10½, per fathom. In the 100, driving east of shaft, the lode is 18 in. wide, and is worth 10½, per fathom. We believe that it will shortly change for the better. The lode in the 77, driving east of shaft, is yielding good stones of copper ore, and promising an improvement.—Doctor's Shaft: The lode in the deep adit, driving west of this shaft, is 3 ft. wide, and producing some good copper ore, but not sufficient to value.

OLD BATHOLDS.—Arthur Waters, Sept. 14: Everything is being pushed on here as fast as possible. We are preparing to drop the lift to the bottom of the engine-shaft. I shall soon be ready for the engine, &c.

OLD BATHOLDS.—Sept. 14: The engine-shaft is cut down, divided, and cased to the 100 fm. level, and is now 10 fms. below the 60 (the supposed bottom of the mine), if otherwise we must enlarge the shaft, to get the kibble down to draw away the stuff, which will occupy about a month or so to make it complete to the 60; at any rate it must eventually be done before we can draw from the level. We have been in the 50, north of the shaft, about 30 fathoms; at this point the level is full of stuff, owing to the stall in the back having broken down. The workings by the timber in the back are very extensive, 7 feet the level seems to be sloping below, but to what extent we cannot say yet; however, the lode appears to be broken up between two good walls, and by the large scrolls of silver-lead left by the slides it is evident there must have been a good lode here, therefore

This we consider the main part of the lode. In the tribute pitches there is no change to report.

WHEEL BULLER.—James Ineh, Sept. 19: Hoeking's shaft, sinking under the 114, is worth for tin 704, per fathom; for tin of the shaft (3 fms. long and 6 ft. deep). The 114, driving west, is worth for tin 460, per fathom; a strong, kindly lode. The 114, driving east, is producing low-quality tin for tin. The slope west of Stevens's shaft. In the back of the 102, is worth for tin 141, per fm. We are busily engaged in clearing the 50 and 60 fm. levels, putting in tramroad, &c. In the south part of Copper Hill sect, which is added to Wheel Buller, we hope shortly to be able to raise some good copper ore from this part of the mine.

WHEEL CREBOR.—John Goldworthy, Sept. 13: In the 120, east of Cock's shaft, the driving is by the side of the lode, the 126 cross-cut south the stratum is mixed with veins of copper and lead ore. The 126 cross-cut is being made. In the 72, east of Cock's shaft, the lode is cut into north 72 to 8 ft. at the furthest point reached, composed of capel, quartz, mundle, white iron, and copper ore; a strong, fine masterly lode. In the rise in the back of the 72, in the end driving east from the top of the rise, the lode is 2½ ft. wide, composed of quartz, white iron, and copper ore, worth 61, per fathom. In the clearing of the 60, west of Kelly's shaft, good progress is being made; the lode in places is fair tribute tin. The copper ore, in the whole, has improved.—Georgiana: The elvan by the side of the lode is rather hard, and letting out streams of water; at present the progress is somewhat slow. We shall take down the lode in a few days.

WHEEL GRENVILLE.—G. R. Odgers, W. Bennetts, Sept. 9: The ground in the 110 east is very much eased. As this was the case at all the upper levels before meeting with tin, we are expecting an improved lode shortly. The different levels at this mine are of the same value as we stated on Thursday. We are getting on well in pressing the last month's tin. We hope next week to commence sinking the north-east shaft.

WHEEL FRIENDSHIP.—In the 150, west of Whitburn's cross-cut, the branch is small and poor, and the ground hard and spare for driving east. Two stops under the 150 will yield from 1½ to 1¾ ton of ore per fathom each. Two stops in the back of the 150 will yield 1½ ton per fathom each, and one stop in the bottom of the 140 will yield from 1½ to 1¾ ton per fathom. We hope to commence sinking the eastern winze in the bottom under the 150 some time this week. No change to report in the 80 cross-cut, south in the Clebe.

WHEEL LUGBY.—W. Harris, Sept. 13: South in the cleared the engine-shaft 6½ fms. below the adit, but not yet reached the bottom. I broke first-rate tin to-day from the side of the shaft, 6 fms. below the adit, and believe that the stuff broken from the shaft will pay well for stamping, and some of it good work. The ancients sunk the shaft for tin, and if it paid them well, the price of tin was so low, what may we reasonably expect? I like the appearance of it very much indeed. The two ends, driving east and west on the tin courses in the bottom of the adit, are looking very well. I never saw them in a month ago, and they are looking better. The lode in the adit, driving west, is a very kindly one, producing a little tin, but not much to value. I am expecting an improvement here shortly. The lode in the eastern shaft is large—6 ft. wide, worth from 151 to 201, per fathom for length of shaft. There is no particular change in the cross-cut driving south, nor in the middle shaft. We are pushing on every branch of our surface department with all speed.

W. Harris, Sept. 14: We have got to the bottom of the engine-shaft; it is 7 fms. below the adit. There is a large lode at the bottom of the shaft; I cannot tell its size, but I believe it is a good lode. I broke some very good stones of tin from it to-day. We department with all speed cut the shaft down to its proper size, and then ease and drive it to be ready for driving up the lift. The two ends driving east and west on the tin course are looking well; they are worth in the aggregate 401, per fathom. There is no particular change in any other part since my last.

WHEEL KITTY (St. Agnes).—S. Davey, John Williams, Sept. 9: New Shaft—Pryor's Lode: There is no change worthy of remark at this shaft, sinking under the 118. In the 118, driving west of shaft, the lode is worth for tin 131, per fathom. In the 108, driving west of shaft, the lode is worth for tin 161, per fathom. In the 106, driving east of shaft, the lode is worth for tin 131, per fathom. In the 104, driving west of shaft, the lode is worth for tin 131, per fathom. In the 102, driving west of shaft, the lode is also worth 131, per fathom. No change to remark in the cross-cut driving south of the 94 fm. level east. In the rise in back of the 34, east of shaft, the men are desmting the lode.—Old Lode: In the 82 fm. level, driving west of Hoigate's shaft, the lode is worth 141, per fathom.

WHEEL RUSSELL.—John Bray, Sept. 14: The lode in the 25 fm. level, east of shaft, is worth 141, per fathom. The 40 is worth 101, per fathom. The lode in the stopes is worth 251, per fathom. The lode in the adit level is producing small stones of ore. We shall sample by the end of this month from 170 to 30 tons.

WHEEL SPARNON.—W. Tregay, Sept. 9: In the 55 south cross-cut nothing any importance has been interested since last report. Ground favourable.

WHEEL UNY.—W. Rich, M. Rogers, S. Coade, Jun., Sept. 9: We have commenced the rise in the back of the 80, east of Gooding's, with the winze below the 60; this will be made very valuable for King's new skip-shaft, and has opened out a good piece of the ground for the 80, east of Gooding's. The 45 east is worth 101, per fathom; the 60 east, 121, per fathom; the 80 east, 201, per fathom; the 100 east, 101, per fathom; the 120 east, 81, per fathom; the 130 east, 71, per fathom; the 140 east, 101, per fathom; the 150 east, 51, per fathom. The 150 west yields a little tin. The 35 in the back of the 160, east of engine-shaft, is worth 181, per fathom. The 90, west of incline shaft, is worth 141, per fathom. We are rising and stopping the 100, west of incline shaft, in Mr. Hall's land, to prove the value of the lode.

WILLOUGHBY.—J. Nottingham, Sept. 13: There is no change in the new engine shaft sinking from surface. The mine is now sinking to make good progress in sinking. We have set up the little wheel in its new place, and shall complete the line of rods from it to the new shaft in two or three days more, after which shall begin with the things for the winding drum, &c., castings for the new pul on the mine. The masons are making good progress with the big wheel-pit. I shall expect them to finish it in about a fortnight if the weather be now on the mine. We have set the two banks of the reservoir above the mine, each one to two men and three boys. We shall flush the lower one in two days' time. As you are aware, the vessel which was to bring ore to the Rock Lake with these men, which was to be used for the purpose of bringing ore to the Rock Lake, met with a disaster, which obliged her to return to Liverpool for repairs, but she now succeeded in reaching the island, and is now taking in the machinery, and if weather permits she should be at Trefrin in the course of next week.

BOTALLACK MINE.—Botallack is, we believe, the most interesting mine now in Cornwall. It is situated at the extreme west of the county, few miles north of the Land's End, close to Cape Cornwall, and running underneath a shore lashed by the full fury of the Atlantic. The workings are on the very verge of the cliff, and are carried beneath the sea, many hundred feet below low-water mark. At every ebb and reflux of the tide the waves are heard breaking like thunder overhead, and the huge pieces of stone rolled backwards and forwards on the surface of the firm can be distinctly heard above, grating harsh thunder. The water, but during stormy weather, some of the noise became so loud as to twice lest the sea should break in upon them. The whole mine is an unshining undertaking. In order to carry on the working of it the parts of enormous steam-engine had to be lowered a long distance down the rock facing the sea, the cliff being almost perpendicular, and the mine has been considered a most interesting and interesting that for many years visitors have come from all parts of the country to see it, and even royalty has on some occasions been attracted. "Kings, princes, nobles, and persons of rank," have been hospitably entertained here, and have descended into the mine, and under the sea to be struck with astonishment at the enterprise, industry, and skill of Cornwall, and their extraordinary fact connected with the mine is the number of fathoms of ground spent every quarter—never less than from 1500 to 1600 fms., and of 212 fms. in the levels, stopes, and winzes; 1206 fms. are stoped on tute, and 146 fms. broken by tributaries. Botallack is a very large set, probably the largest of the mine, broken by half a mile broad. Unlike most other mines in Cornwall, Botallack has had few foreign visitors amongst its shareholders. At present time the 200 shares into which the mine is divided are held by 84 proprietors, nearly the whole of whom are resident in the locality. There are at present 700 hands employed on the mine, 400 of whom are engaged underground. The earnings of the latter average about 31. 5s. per month. A large number of the men, however, earn 41. and upwards. There are 156 heads of stamps, of which are worked by steam and 48 by water. There are 14 steam-engines for pumping, sawing, and stamping. The sizes of these engines are much smaller than those in the Redruth and Camborne districts, the largest draught engine on the surface, 27,000 tons of which are more or less profitable for steam draw, and the tons of deads are thrown over the barrows. It is interesting to learn that one-fourths of the mine are held now by the same families as started the concern in 1836, when the late Mr. Stephen Harvey James was its chief promoter, who subsequently became the purser, an office now held by his son. On the other hand, the spacious account-house are to be seen beautiful plans of the mine, and down by the independent, civil engineer, of Truro. These are complete copies in their way, and show the work of every part in the clearest and most manner. The deepest part of the mine is about 250 fms. from the surface. The diagonal shaft, which goes under the bottom of the most cordial manner, charge of 10s. 6d. is made to every one who descends this diagonal shaft, his money is distributed amongst the poor and disabled miners.

DEPENDENCE MINE.—Referring to this mine, of which full remarks were published in the Supplement to the Mining Journal of August 5, a correspondent writes, "I cannot state how much the mine was purchased for, but that he understands it was to be sold to the English capitalists for £10,000; at that price, he thinks, they would have been very likely to have the mining experts engaged by the Bureau declare that a much higher price should have been paid for the mine. As this is the first case brought before the Mining Bureau for examination, it is considered to be a matter for congratulation that it will give a satisfactory evidence of the earnest exertions of the Bureau, and of the reliance that may be placed on its endorsements."

AMONDS AT THE CAPE OF GOOD HOPE.—The news from the diamond fields continues highly satisfactory. The finds were enormous. In search carried on in the King William's Town district for diamonds and stones several topazes and a good many agates had been turned out, especially in the vicinity of Mount Coke. A diamond of 120 carats had been found at Du Toit's at Du Toit's. Atterstone, who was one of the first to detect diamonds existed in South Africa, was present when the diamond was unearthed. A letter from Du Toit's Part dated July 15, contains the following interesting particulars:—"The weather has been cold. Ice on the ground and the ground covered with a white frost in the morning. Raymond, who have started their engine and sifting machine just at the back of our mine. The engine is a success, but the sifting machine is susceptible of improvement. The steam-engine created an immense sensation among the Dutch, and I never heard a steam-whistle before. They crowded round the very little mine."

carat diamond. There are 20,000 people at this farm, De Beer's, and Bultfontein, and although you see little mention of the finds in the papers they are immense. I see diamonds from 20 to 60 carats every day. At De Beer's, Raw-stone, of Colerberg, and half a dozen others purchased a claim for 110l., and in four weeks took out 63 diamonds, including some of 17, 16, 8, 6, 4, and 5 carats.

EBERHARDT AND AURORA.—The profit realised during August amounted to 13,000l., although the whole of the stamping power was not employed, and a heavy item was deducted properly chargeable to capital.

KANSAS.—The applications far exceeded the number of shares to be allotted. Information has been received that one block of ore has been taken out of these mines, weighing 1238 lbs. This valuable specimen was to be exhibited at the Agricultural Association Exhibition. It attracted considerable attention, it being one of the largest and finest blocks of pyrites yet taken from the mines.

RICHMOND CONSOLIDATED.—Private intelligence has been received during the week showing that these mines are opening out in a most satisfactory manner, the reserves of ore are being gradually increased, and large profits realised.

UTAH.—From what has recently appeared with reference to this territory as a mining district, it seems necessary to state that scarcely anything was known of it a short time since, and that the mines, so far as developed, promise to surpass in richness and extent those discovered in any district on the Pacific Coast. The mines of the Utah Company, with one furnace worked only to one-fifth of its permanently available capabilities, a clear profit of 21 per cent. is, it is said, already obtained, and as two additional furnaces of greater power are to be forthwith put into operation, the early prospect is a profit of upwards of 100 per cent. upon the capital. Even this estimate is supposed to be below the market, as it is founded on the calculation of an average value of 31l. per ton for the ore, whilst the ore brought to the market has realised 37l. and 40l. There can, therefore, be no doubt that the price of shares, which is at present 300 or 400 per cent. below those of the Eberhardt, and other older and better known properties, will before long range equally high, thus, in addition to large intermediate dividends, quadrupling or quintupling the invested capital upon realisation.

TANKERVILLE.—There is a very fine lode at the shaft sinking below the 110. A very large cavity has been opened, upon one side of which there is 7 ft. of nearly solid lead.

ROMAN GRAVELS.—This mine continues to open out most satisfactorily. The boiler has been put together underground at Corfield's, and the engine was to be sent down on Thursday.

WEST CARADON.—This mine is again attracting considerable attention in the rich Caradon copper district. The lode recently intersected in the 66 cross-cut is yielding fully 3 tons of rich ore per fathom, and seeing that this is one of the lodes that produced the profits in the adjoining South Caradon Mine, the shareholders in West Caradon have every reason to congratulate themselves that after the heavy outlay they have made they have now every reason to expect that in a short time the mine will again be in its former dividend-paying condition.

POLBRENE (St. Agnes).—At this valuable mine they are getting about 400l. worth of tin a month, with every prospect of increasing the quantity. The dressing-floors, &c., are very extensive, and Capt. John Nancarrow deserves credit for the able manner in which he has carried on the operations at this mine.

HINGTON DOWN.—It will be seen in reference to our reports of meetings that this mine is in a position to show a dividend at the next general meeting; and as the lode in the mine is still worth 12 l., and the 110 west 40l., the shareholders may look forward to a renewal of returns for their patience and perseverance. This is only another instance of the uncertainty of mining speculation. Not 12 months ago many of the shareholders were advocating the suspension of operations, and winding up the concern, in consequence of the poverty of the mine, low price of copper, &c., and yet a few months have rewarded them by a valuable and, probably, continuous course of ore, together with a prospect of permanent dividends.

International Exhibition, 1871.

WIRE TRAMWAY (HODGSON'S PATENT).—The SAMPLE LINE exhibiting has RUN TWO THOUSAND FIVE HUNDRED MILES, and delivered SEVEN THOUSAND TONS at the terminus. WIRE TRAMWAY COMPANY (LIMITED), 21, Gresham Street, E.C.

THE WIRE TRAMWAY COMPANY (LIMITED) are PREPARED TO SURVEY AND ESTIMATE FOR LINES, and EXECUTE CONTRACTS at HOME and ABROAD. They have engineers employed in constructing these Lines in England, Holland, Prussia, Austria, Russia, Italy, Spain, United States, Peru, Chili, and River Plate.

The system has been adopted by the English and Anglo-Indian Governments, the Spanish and Prussian Governments, and for many of the first mines and ironworks at home and abroad.

WIRE TRAMWAYS COST, exclusive of power and rolling stock, from £250 to £300 per mile for quantities ranging from 10,000 to 100,000 tons per annum; and are at present successfully employed in lengths from a quarter of a mile to fourteen miles in transport of coal, ironstone, fire-clay, coke, general mining produce, beet root, sugar cane, &c.

They are working in most difficult and mountainous districts, where any other means of transport is impossible, as well as through ordinary country.

WIRE TRAMWAY COMPANY (LIMITED), 21, Gresham Street, E.C.

IMPERIAL OTTOMAN MINING COMPANY (LIMITED).—NOTICE TO SHARE WARRANT HOLDERS.

The directors of this company propose issuing the additional capital required to carry on the works at Pelidli upon the following terms:—

£500 of debentures for sums of £5 and upwards for two years, renewable for three years more at the option of the board, bearing interest at 10 per cent. per annum, payable quarterly, commencing on the 1st of October next. For each £1 subscribed one fully-paid ordinary share of £1 will be given as bonus. (Thus, a subscriber of a £5 debenture would receive five fully-paid shares therewith.) These terms are offered in the first place to the shareholders in the company, and will remain open to them until the 30th inst., when, if not fully subscribed, they will be offered to the general public. Should the applications from the shareholders exceed the £5000 required, the debentures and shares will be allotted *pro rata* to the holding of each applicant.

Forms of application may be obtained at the company's office, which must be accompanied by a deposit of 10s. in £1 upon amount applied for, and the remainder on allotment, payable at the company's bankers, Messrs. Roberts, Lubbock, and Co., Lombard-street.

Applicants must leave their names and scrip at the office of the company, which will be returned to them on allotment.

By order, C. W. CARPENTER, Secretary.

48, Moorgate-street, September 5, 1871.

IMPERIAL OTTOMAN MINING COMPANY (LIMITED).—The following Telegram has been received by the Board:—

"Pera, 6th September, 1871.—Pelidli ore shipped yesterday by steamer Marsden for Liverpool. Bills of lading by this post." (Signed) WILLIAM HARVEY.

GREAT SOUTH TOLGUS MINE.

IN LIQUIDATION.

NOTICE IS HEREBY GIVEN, that ALL CREDITORS and other persons, having any claims or demands upon the GREAT SOUTH TOLGUS MINING COMPANY, REDRUTH, CORNWALL, are hereby required, on or before the 30th day of November, 1871, to send by post, prepaid, to Mr. WILLIAM AUGUSTUS BUCKLEY, of No. 22, Great St. Helens, Bishopsgate-street, in the City of London, THEIR CHRISTIAN AND SURNAMES, ADDRESSES, and DESCRIPTIONS, the full particulars of their claims, and a statement of their accounts, with the nature of the securities (if any) held by them; or, in default thereof, they will be pre-emptorily EXCLUDED from the BENEFIT of the ASSETS of the said company, and the Liquidators will proceed to distribute the same (if any) to the persons entitled thereto, having regard only to the claims of which they shall then have had notice, and will not afterwards be liable for the assets of any so distributed, or otherwise dealt with, or for any part thereof, to any person of whose debt or claim they shall not have had such notice.

Dated this 1st day of August, 1871.

EAST CARN BREA MINE.

IN LIQUIDATION.

NOTICE IS HEREBY GIVEN, that ALL CREDITORS and other persons, having any claims or demands upon the EAST CARN BREA MINING COMPANY, REDRUTH, CORNWALL, are hereby required, on or before the 30th day of November, 1871, to send by post, prepaid, to Mr. WILLIAM AUGUSTUS BUCKLEY, of No. 22, Great St. Helens, Bishopsgate-street, in the City of London, THEIR CHRISTIAN AND SURNAMES, ADDRESSES, and DESCRIPTIONS, the full particulars of their claims, and a statement of their accounts, with the nature of the securities (if any) held by them; or, in default thereof, they will be pre-emptorily EXCLUDED from the BENEFIT of the ASSETS of the said company, and the Liquidators will proceed to distribute the same (if any) to the persons entitled thereto, having regard only to the claims of which they shall then have had notice, and will not afterwards be liable for the assets of any so distributed, or otherwise dealt with, or for any part thereof, to any person of whose debt or claim they shall not have had such notice.

Dated this 1st day of August, 1871.

THOMAS B. LAWS, One of the Liquidators.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, SEPT. '5, 1871.

COPPER.				IRON.				Per ton.
Best selected ..p. ton	76	0	0-78	0	0	Bars Welsh, in London	7 15	0-8 5
Tough cake and tile	74	0	0-76	0	0	Ditto, to arrive	7 15	0-7 17
Sheeting & sheets ..	77	0	0-80	0	0	Nail rods	8	0 0
Bolts	79	0	0-80	0	0	,, Staffs, in London	8 15	0-9 0
Bottoms	80	0	0-83	0	0	Bars ,, ditto	8 15	0-9 2
Old	60	0	0-—	—	—	Hoops ,, ditto	9 15	0-10 0
Barra Barra	77	0	0-—	—	—	Do. at works ..	8	0 0
Wire.....per lb. 0	9 3/4-10d.					Hoops ,, ditto	8 15	0—
Tubes	0	0	10 1/2-10 3/4			Sheets, single ..	10	5-10 10
BRASS.				Pig No. 1, in Wales ..				Do. No. 1, in Clyde ..
Sheets	Per lb.	8d.-8 1/2d.				Refined metal, ditto ..	4	5-6 0 0
Wire	8d.-					Bars, common ditto ..	7	0 0
Tubes	8d.-16 1/2d.					Do. mch. Tyneor Tees 7	10	0-7 15
Yellow Metal Sheathing ..				Do. railway in Wales ..				Do. Swed. in London ..
Sheets	6 1/2d.-7 1/2d.					To arrive	10	0—
SPELTHER.				Pig. No. 1, in Clyde ..				Do. f.o.b. Tyneor Tees 2
Foreign on the spot £18	5	0-18	10	0		Do. Nos. 3, 4, f.o.b. do. 2	6	-6 2 7
,, to arrive .. 18	5	0-—	—			Railway chairs	3	17 0-12 0
						,, spikes	11	0-12 0
ZINC.				Indian Charcoal Pigs,				In London, p. ton ..
In sheets	24	10	0-—				6	5-6 6 10
QUICKSILVER (p. bot.) £11 <td>0</td> <td>0-—</td> <td></td> <td></td> <td></td>				0	0-—			
TIN.				STEEL.				Per ton.
English blocks ..	£136	0	0-—			Swed., in kegs (rolled) ..	12	5-10 13
Do., bars (in bris.)	137	0	0-—			,, (hammered) ..	13	0-14 0
Do., refined	140	0	0-—			Ditto, in faggots	15	0-16 0
Banca	135	10	0-136	0		English, spring	17	0-23 0
Straits	132	0	0-133	0				
TIN-PLATES.*				LEAD.				Per ton.
IX Charcoal, 1st qua. f.	9	6	1-10			English Pig, com.....	18	0-—
IX Ditto, 1st quality	1	6	0-17			Ditto, L.B.	2	6-18 5
IX Ditto, 2d quality ..	1	7	0-18			Ditto, W.B.	Nominal.	
IX Ditto, 3d quality ..	1	13	6-14			Ditto, sheet.....	5	-18 10
IX Ditto, 4th quality ..	1	11	0-13			Ditto, red lead	20	10 0
IX Ditto	1	11	0-13			Ditto, white	28	0-30 0
Canada plates, p. ton ..	13	10	0-15			Ditto, patent shot ..	20	5-—
Ditto, at works	13	10	0-14			Do Spanish	17	10 0
* At the works. 1s. to 1s. 6d. per box less.				† Add 6s. for each x.				

* At the works, 1s. 10d. per box less. † Add 6s. for each x. Terne-plates 2s. per box below tin-plates of similar brand.

REMARKS.—A slightly better demand prevails for all metals. Sellers maintain prices with firmness, and look forward to realising higher rates ere long. All manifestations of distrust and uneasiness have entirely disappeared, and succumbed to a feeling of perfect security. There are good reasons for this renewal of confidence, which altogether dissipates any expectation of a retrograde movement. In many of the large undertakings and Government works now in course of execution metals are being very extensively used. The constant formation of railway, tramway, telegraph, and other companies are creating fresh permanent outlets, and prove incalculable advantages to our trade in a variety of ways. Independent of the vast addition to the home consumption, there are larger exports to the colonies and foreign ports, and our commerce is annually enlarged by the opening up new markets in every direction. The rapid strides being made in the development of the remote parts of the earth arise from the increased facilities of comparatively recent years in the mode of transit and communication afforded by locomotion and electricity, the value and importance of which to the metal trade is incalculable, and cannot be over-rated, as metals are chiefly employed in the construction of such means of conveyance. Iron, steel, and brass are, perhaps, more immediately benefited, but all metals necessarily participate, sooner or later, in proportion to the progress of events. Besides these connecting links between places both near and distant, the exploring of unknown regions and unfolding of endless resources, there are at the present time other beneficial influences in operation—commercial treaties, modified tariff, international exhibitions, the advancement of colonisation, the plethora of money, the friendly relations of the Great Powers; above all, the general disposition, induced by the people of all nations to extend and cultivate commercial intercourse, and invest capital in sound and legitimate enterprise.

COPPER.—The demand is gradually improving, and prices stiffening. Ores have realised 14s. per unit, and Chili bars, that were selling only a short time ago at 66l. 10s., are now 68l., best brands 69l. 10s. Indian sheets, which receded to 75l., have advanced to 77l., but these slight improvements appear to be merely the beginning of a more important rise, sellers being more disinclined than ever to conceding anything. Charters are again light from Chili, for the first fortnight in August only amounting to 1300 tons. These reduced supplies month after month cannot fail, in a short time, to make a great impression upon the market, and tend to give a strong impulse to prices. This is the natural effect produced by the continued prevalence of low and unremunerative prices. The regular supplies fall off, and quite cease from many places. Not only does Chili send a considerable diminution in her shipments to England, but Russian, Austrian, Tunisian, Swedish, Baltimore, and Lake Superior are now never heard of here, and also some of the Australian brands—Kapunda, Burra Barra, &c.; the former seems to have died out, and the latter is becoming very scarce; but, irrespective of the cessation of supplies from many foreign parts, there is the abandonment of numerous Cornish and other mines, the working of which would be attended with positive loss, and much time must elapse to renew the working again of these mines, even were prices to be advanced sufficiently high to render it profitable to re-open the working of such mines. Speculation is eager, and prices have been neither quickened or depressed by such operations. But there certainly appears a good chance just now for a bold move, which would be entered upon under very favourable circumstances, and the opportunity once lost may be gone for ever. Stocks are diminishing and demand increasing. Importers are reluctant to accept present rates. Smelters are unable to reduce their prices. Miners are interested, of course, in lifting the market. Consumers do not complain of prices being too dear, and the general feeling is that moderately advanced rates would not in any way interfere with the consumption.

IRON.—No visible alteration has occurred in our market for Welsh or Staffordshire kinds of iron. The same uncertainty prevails in both districts as to the wages question, which is still being agitated, and keeping business in London in a state of partial suspense. Whatever may be the ultimate determination of the ironmasters with regard to prices, it is pretty evident the men's requests, so long as they are not unreasonable in their demands, will have to be complied with. There is no alternative but to submit, and it is better that the masters should do so with a good grace than to allow their workmen to resort to extreme measures, and to come to a dead strike. Such a course would be calculated to excite enmity between the employer and employed, and cannot lead to any happy result. Undoubtedly the best course to adopt, and that which will afford the greatest possible satisfaction, will be a speedy settlement of their differences upon mutual terms, and if the respective interests of each party are well considered, the welfare of both must be best promoted by an arrangement that will regulate not only the present scale of wages, but such as will prevent these repeated misunderstandings. The iron trade is far too important to admit of these constant interruptions. The delays in delivery and question of price being kept in suspense cause inconvenience and loss of trade, and it is a matter of much magnitude, and likely to be attended with very serious consequences if allowed to go on for any length of time. The consumer is, perhaps, the best judge as to whether the advance in price is likely to affect consumption in any way. As yet scarcely an order has been countermanded, and the probability is that so far as the home trade is concerned an advance of 10s., 20s., or 30s. per ton will make no difference. It may, however, be otherwise with the foreign demand, but considering the prosperous turn things have taken there seems little to fear yet awhile. Where the ironmasters were more seriously involved in such cases of orders having been taken based upon the old scale of wages, but that might be in a measure overcome by dating forward a fixed time, to be agreed upon, from which the advance in price is to be reckoned.

In Swedish iron there is still a good enquiry, and owing to the present low rates of freight offering to the East, parcels on arrival are eagerly sought after. We are now drawing near the close of the season when supplies become limited, and can only be brought forward at increased rates of freight and insurance. The price of iron in Sweden is higher than in London, and for next year sellers are scarcely prepared to name a price. The prospects of this market are very good, and Indian specifications stand a fair chance of realising better rates during the winter months. Scotch pigs have somewhat fluctuated, but not to any material extent, the more general price being 60s. 6d. cash, and 60s. 9d. one month, closing with an easy tendency. Shipments are still favourable, and compare well with the same period last year:—

SHIPMENTS.—Week ending Sept. 9, 1871	14,685 tons
Week ending Sept. 10, 1870	10,977 "
Increase	4,608 "
Total increase since Dec. 23, 1871	133,202 "

LEAD.—Shipping orders for China and America are still limited for ordinary English pig; the home demand, however, is sufficiently good to enable sellers to uphold prices with firmness.

SPELTHER.—This metal remains quiet for Silesian and Belgian. The consumption of foreign has considerably declined of late years, giving place to English production. Hard is not so much enquired for, and prices slightly drooping.

TIN.—The market during the week has taken an almost unaccountable turn, and from the nature of the transactions, and general appearance of the market, it is difficult to draw any positive conclusions. As regards English, the price is quoted 2l. higher than last week, and Straits has risen 3l. to 4l. per ton. In Banca there is no greater change than 10s., but these advances may possibly be lost as quickly as gained, as circumstances hereafter may reveal. The position of Banca in Holland has been very steady, and the forthcoming sale does not appear to exercise any depressing influence. As usual, just previous to these Banca sales business is limited, and until the sale comes off the price is always a little uncertain. No material reduction is anticipated, and there may be a slight rise,

but the prevailing opinion is that the tin will be all sold much about present rates. Messrs. Henry Bath and Son are inviting tenders, to be opened on Wednesday next, for about 300 tons of Straits and Malacca tin.

TIN-PLATES.—Manufacturers uphold former quotations. The demand continues steady for both coke and charcoal.

STEEL.—The market is unchanged. Demand inactive.

QUICKSILVER.—Unaltered. Demand inactive.

COPPER.—Messrs. James and Shakspeare.—About 800 tons of regulus at Liverpool and 600 tons of ore at Swansea have been sold at 14s. per unit, which is the lowest that importers will accept. The Swansea Ticking, which took place on the 12th inst., realised an average of 13s. 9d. per unit, some Canadian ore fetching as much as 14s. 2d. per unit. The average produce was 14 per cent. Chili bars have been dealt in to the extent of about 400 tons at 67l. 10s. to 67l. 12s. 6d. for Lots, 67l. 10s. to 67l. 12s. 6d. for good brands, and 69l. for J. Edwards. Holders for the most part seem disinclined to go on selling except at an advance of 10s. per ton, to which buyers do not yet respond. The mail which arrived on the 11th inst. brought advices of Chilian charters for second fortnight in July to the extent of 1900 tons pure for England (800 tons being in bars and ingots, and 1100 tons in ores and regulus) against 3900 tons pure in corresponding period of last year. On the same day news was received by telegram announcing those for the first fortnight in August to be 1400 tons pure, of which 1300 tons in bars and ingots for England, and 100 tons for the Continent, description unknown, against 1400 tons pure in the like period of 1870. The demand for Australian has increased, and the importers of Wallaroo, in which sort a further large business has been done, are firm at an advance of 10s. to 20s. upon last quotations. English has improved as regards raw, but there is no revival yet in the demand for manufactured for India.

Messrs. Vivian, Younger, and Bond.—An exceedingly large trade in all descriptions of raw copper has taken place since our last issue. We have to report sales of about 700 tons of Chili bars, principally at 67l. 10s. for Lots, 68l. for Urmeneta, and 69l. 5s. for best brands. At the close an advance on these rates is asked. A cargo of regulus at Liverpool and one of ore at Swansea fetched 14s. At the Swansea Ticking, on the 12th inst., 1885 tons of ore, average produce 15 1/2 per cent., was sold at an average of 13s. 9d. per unit. Nearly all the Wallaroo on the spot has been bought for Russian account; for the small quantity available on the spot 77l. is now asked. The demand for English raw copper at something under the smelters' quotations has been large, and all the cheap sellers and the second-hand lots have been pretty well cleared out. It is not easy to trace this continued firmness in copper to its foundation, for just now there is no special reason why values should improve, still holders of all descriptions of this metal are so much encouraged by the result of their recent firmness that it is not surprising they should take a sanguine view of the article, and try to dictate terms to the buyers. On the 11th inst. the cablegram in advance of the mail of Aug. 17 from Valparaiso came to hand, advising charters of 4300 tons of fine copper—viz., 3200 tons in bars and ingots, and 1100 tons fine in ores and regulus for the month ending Aug. 17. The alteration in the delivery of the mails in Chili makes the usual fortnightly account unavailable, we therefore make up the quantity for the month.

Messrs. Henry Rogers, Sons, and Co.—In raw material and fine foreign there has been a large trade done, and at better prices, but English copper is still neglected, especially manufactured; the market for which in the East is still more unusually depressed. Ores are quoted 14s., an advance of 1/2d., whilst Burra Barra and Wallaroo are 77l. to 78l.; English tough, 76l., and the same figure; sales of these, however, have been made at low as 75l. The market, on the whole, is not in an unhealthy condition, consumers being especially busy, and moderately willing buyers. In yellow metal there is more doing, especially in sheeting, and brass of all sorts is in demand.

The settlement of the fortnightly account in the MINING SHARE MARKET occupied the chief attention of the dealers during the early part of the week, and there were comparatively few business transactions, except in one or two prominent mines, while general quotations were for the most part nominal. When the "account" was over, however, greater activity set in, and the market leaves off better both for dividend and progressive mines.

Those chiefly dealt in have been Cock's Kitchen, Carn Brea, Tankerville, West Tankerville, West Frances, Wheel Seton, South Frances, Wheel Grenville, Wheel Kitty (St. Agnes), Great Vor, Dolcoath, South Conduvor, Gwydyr Park, West Caradon, West Chiverton, Chontales, Eberhardt and Aurora, Pacific, Utah, and a few others.

Carn Brea shares, after reaching 145 to 150, declined on Thursday to 137 1/2, 142 1/2, and leave off 140 to 145. Cock's Kitchen shares advanced to 30, 32; West Frances, 65 to 70. Devon Great Consols, 95 to 100; Coles' winze is still worth 100l. per fathom; the new south lode, at Railway shaft, in the 130 east, is worth 25l. per fathom; in the 130 west, 20l. per fathom; Gilbert's winze, below the 115, is worth 25l. per fathom. Dolcoath shares have been more dealt in, at 180 to 185; Bog, 28 to 29; East Caradon, 4 1/2 to 5; East Chiverton, 4 1/2 to 5; East Wheel Grenville, 3 to 3 1/2; Great Laxey, 16 1/2 to 17 1/2; Great North Laxey, 17s. 6d. to 22s. 6d.; Great Caradon, 3 1/2 to 4; Great Wheel Vor, 9 1/2 to 10; Herodfoot, 42 to 44; Marke Valley, 5 1/2 to 6; Lovell, 1 1/2 to 2 1/2; Parya Mountain, 3 to 3 1/2; Penhalls, 5 to 5 1/2; Pennerly, 3 1/2 to 4; the lode in the 130, east of engine-shaft, is worth 2 1/2 tons of lead ore per fathom, and no north wall. Perkins Beach, 1 1/2 to 1 1/2; Plynlimmon, 1 1/2 to 2 1/2; Providence Mines, 24 to 26; Roman Gravel, 19 to 20; South Conduvor, 9 1/2 to 10; South Croft, 2 1/2 to 3; Spear Moor, 18 to 20; Tankerville shares have been rather largely dealt in, and leave off 16 to 16 1/2; Tincroft, 48 to 50; Trumpet Consols, 16 to 18; Van, 66 to 68; Van Consols, 1 1/2 to 1 1/2; West Baset shares not quite so firm, at 4 1/2 to 5.

Perran Wheel Virgin, 4 1/2 to 5; at the meeting held in Cornwall, the accounts showed liabilities over assets 590l. 5s., and a call of 3s. per share was made. The report states that the mine is now presenting more favourable indications for the production of lead, and can now be developed at a comparatively small monthly cost. The agents still think the shareholders will ultimately be rewarded for their outlay, but up to this time certainly the results have been disappointing. West Caradon, 2 to 2 1/2; West Pant-y-Go, 3 to 4; Wheel Lucy, 2 1/2 to 3; the ends altogether are valued at 40l. per fathom. Gwydyr Park, 17s. to 22s. 6d.; this mine is improving, and coming into regular returns. West Seton, 130 to 140; West Tankerville, 3 1/2 to 4; Wheel Grenville, 7 to 7 1/2; Wheel Jane, 40 to 42; Wheel Kitty (St. Agnes), 9 1/2 to 10; Wheel Mary Ann, 7 to 8; Wheel Seton, 28 to 32; Bullers have advanced to 16, 18; West Jewel, 2 to 2 1/2; West Chiverton have been in demand, and improved to 18, 19.

In foreign mines Eberhardt and Aurora have been firmer, and leave off 37 to 38. The advices by telegram this week state that the profit for the month of August is equal to 13,000l. sterling. South Aurora, 3 1/2 to 3 3/4; Don Pedro, 2 1/2 to 3 prem. Pacific, 4 1/2 to 5; the ledge in the rise at the 550 is 1 ft. thick, and very rich; the ore assayed \$525 per ton of 2000 lbs. Sierra Buttes, 4 to 4 1/2; a meeting called for Sept. 28 to declare a dividend, and transact any general business of the company. Chontales shares have been largely dealt in, and leave off par to 1/2 prem.—that is, shares 1l. paid, 1 to 1 1/2; 2l. paid, 2 to 2 1/2. The advices, which will be found in another column, report a discovery which may lead to very important results. It will be remembered by many of our readers that at the Consuelo Mine a few years ago there was a rich "nail," or leader of gold, from which the native miners had obtained gold to the value of some hundreds of thousands of pounds, and that from this "nail" in the pillars of supports to the native workings the present company obtained altogether something like 40,000l. worth of gold. The shares rose to 60l. per share. Unfortunately, however, the pillars were all that remained rich in Consuelo, and the supply ceased. But it would now appear from Mr. Belt's reports that a continuation of this rich deposit has been met with in San Benito all in whole, or virgin, ground; and when the mail left the lode for the width of the level, 7 ft., and worth 5 ozs. of gold to the ton, with a rich "nail" or leader running through it worth 100 ozs. per ton. The next advices should give some extraordinary results, and they will be looked forward to with the greatest interest by the shareholders. Utah, 17 1/2 to 18.

The Market for Mining Shares on the Stock Exchange during the week has been steady, and several of the best classes of foreign mines have been in demand. Eberhardt shares fully maintain their advance, and have made further progress in the upward direction, being quoted at the close 37 1/2 to 38 1/2; the advices from the mine are very satisfactory; about 17,000l. profit was made for the month of August,

tone prevailed at the close; satisfactory progress is being made with the works at the mines. Birdseye Creek shares continue to attract purchasers, at former quotations. Sierra Buttes are flatter, at 4 to 4½; a meeting is called for the 28th inst., for the purpose of declaring a dividend. In South Aurora shares a fair amount of business has been transacted, the price being tolerably firm, at 3½ to 3¾. An active business has been done in Pacific shares, at an advance; the reports from the mine are very satisfactory; a considerable body of ore is being collected for crushing, and the various points of interest are looking extremely rich. Chontales shares are firmer upon the satisfactory advices, closing price 2 to 2½.

In English mines the dealings are comparatively restricted. Tankerville shares are somewhat flatter, but the report from the mine is most satisfactory. East Van shares are also slightly flatter. Van, Roman Gravel, and Pennerley are firm. Bog and Perkins Beach are well reported on, but shares are quiet. West Chiverton shares, after having declined to 15½, close 18 to 19.

Tin mine shares have been dull. In Carn Brea, East Lovell, Tincroft, and Great Vor, the business has been small, and the former has receded from the highest price.

In copper mines no material feature has occurred. South Caradon shares are quoted 190 to 210, and a fair amount of business has been transacted in West Caradon at 2½ to 2¾. The recent discoveries have induced large purchases. Cape Copper unchanged.

The following are the closing quotations:—Bog, 2½ to 2¾; Assheton, 4½ to 5½; Devon Great Consols, 95 to 105; East Van, 12½ to 13½; East Lovell, 11½ to 12; Great Vor, 9½ to 10½; Great Laxey, 16½ to 17; Marke Valley, 5½ to 6; Roman Gravel, 19 to 19½; Tankerville, 16 to 16½; Van, 55 to 57½; West Chiverton, 18 to 19; Tincroft, 49 to 51; Almada, 1 to 1½; Birdseye Creek, 4 to 4½; Cape Copper, 9½ to 9¾; Chontales, 2 to 2½; Pacific, 5½ to 5¾; Sweetland Creek, 3½ to 4½; St. John del Rey, 3¼ to 3½.

IRISH MINE SHARE MARKET.—Mining shares have been in improved request for the last fortnight, chiefly owing to the recent great recovery of the Wicklow Copper Mining Company's shares from about 5½ to 7½, they being now readily saleable at the latter figure, and holders asking a further advance of 2s. 6d. Mining Company of Ireland shares have improved from 6½ to 6¾. 5s., and Killaloe Slate Quarry shares from 21s. to 22s. 6d. Connors stock, however, has dropped to 90½, and nothing doing. Our Irish Correspondent does not see that with reference to Carysfort Mines he pressed "somewhat unfairly" on the late management, as "Fair Play" complains in the Journal of Sept. 2. As an old and practical miner, he has watched the vicissitudes of this remarkable mining property ever since it was partly opened by Messrs. Pell, Pike, and Salmon, and with but one exception, in the earlier re-working of these mines, he has not observed any great judgment used in the expenditure of large sums.

At the Mining Company of Ireland meeting, on Thursday (Mr. P. B. Aracy in the chair), it was resolved to register the company as a limited company under the Act of 1862, and thus comply with the Mining Company of Ireland Act, 1871. The Chairman explained in submitting the resolution, that Lord Redcliffe made the Act conditional, but they should register under the Companies Act of 1862, which simplified the law relating to companies. By that Act, once they registered they would get rid of many difficulties. For instance, they would get rid of a most embarrassing clause—the registration of the Court of Chancery. They would not be obliged to register every transfer, which was very difficult and very expensive to the company. The next thing gained would be that all their property would be vested in the company the moment they registered. Another very important facility would be that they would be enabled to do legally what, unfortunately, they had been doing illegally for many years—selling foreign ores. Under the old Act they had no power to buy any except Irish ores; but, as he explained at a previous meeting, it was found impossible to smelt the ores at Ballycoursa except by mixing them with foreign ores. At the next half-yearly meeting the Articles of Association under the Companies Act of 1862 would be submitted by the directors.

It is announced that the extensive shipbuilding and engineering works of Messrs. C. and W. Earle, of Hull, have been purchased by a joint-stock company—EARLE'S SHIPBUILDING AND ENGINEERING COMPANY—through the agency of Messrs. Chadwicks, Adamson, Collier, and Co., of London and Manchester, with a capital of 300,000l., in shares of 50l. each, the prospectus of which is published in another column of this day's Journal. The works have long enjoyed a high reputation, and have recently been removed to a new site, with great advantages of space and deep water. The death of one partner, and the sudden prostration by serious illness of the survivor, are the reasons for the sale of the works and property. The land is all freehold. The board is a strong one, with Mr. Reed, C.B., late chief constructor of the Navy, as Chairman and managing director for a period of years. A special report by Mr. Reed, the result of a personal visit and examination, accompanies the prospectus.

The MALAGA SILVER-LEAD COMPANY is about to be formed to work the famous mines of Paquito, formerly known as Parillas. Notwithstanding their great antiquity these mines are still in full work by the natives, but under such a system as to render them in their hands a source of only small profit; but it is calculated that by proper drawing, winding, crushing, and dressing machinery the tens of thousands of tons of lode stuff partly broken underground, some hundreds of tons of silver-lead ore per month may be returned from these hitherto neglected resources, estimated by Mr. Tait Brindley, M.E., late mining surveyor to Earl Granville, at 75,000 tons. This refers only to two lodes, but large parallel lodes were discovered by Mr. Brindley. The mines are within nine miles of Malaga, whence the freight to England is 13s. per ton. The ore is described as averaging 71 per cent. of lead and 20 oz. of silver per ton. The grant is held by a perpetual concession direct from the Royal Mining Board, at a rent of \$24 per annum, with the right of acquiring adjoining lands if required. There is an abundant supply of surface water for all necessary purposes, and the average wages of mining labourers is 1s. 8d. per day. The capital is 40,000l., in 4000 shares of 10l. each, to be fully paid; in addition to this debentures to the amount of 20,000l. will be issued at par, which will be entitled to a preferential dividend of 15 per cent. per annum, and will not be liable to be paid off for 10 years.

The LANETOSA LEAD AND ZINC MINING COMPANY, with a capital of 24,000l., in shares of 24l. each, and a board of direction composed entirely of gentlemen connected with the management of dividend-paying mines in the same district, has been formed for purchasing and developing ten concessions, containing an area of 187 acres, constituting the existing Lanetosa Mines, with the plant, tools, and all ores, and materials thereon; and additional concessions of 200 acres, the right to which has been recently acquired by the vendors. The climate is good, and an abundant supply of labour can be obtained at a very cheap rate, a large number of miners residing on the spot. The ores can be forwarded from the mines to Limpia, and thence to Swansea, at a cost, including carriage, storage, and freight, of 18s. per ton. Extensive deposits of calamine, or zinc ore, exist in six of the concessions, from which more than 20,000 tons have been extracted, yielding a considerable profit. These will be explored, as they have not hitherto been, by systematic works, and will, it is expected, yield good returns; but the purpose for which more particularly this company is formed is to explore and work the lead lodes which exist in the other concessions. The plan of operations proposed by Messrs. John Taylor and Sons is to work the most promising calamine deposits, and at the same time, to prosecute a system of exploratory works on the lead lodes in the concessions named—Anuncion, La Luisa, and La Helena. This will mainly be accomplished by adit levels to be driven on the several lodes, which would prove them at points of great promise to depths varying from 30 to 70 fathoms from surface.

The MENZBERG MINING COMPANY has been formed to work the mines of that name, adjoining the celebrated St. Josephberg and Marienberg Copper Mines, on the banks of the Rhine. The St. Josephberg and Marienberg Mines have paid in dividends the sum of more than 1,500,000l. from working on a comparatively small part of their lodes at a shallow depth. It is stated that all these lodes have been proved to run through the Menzberg Mines. The property comprises an area of two miles east and west and a mile from north to south, and is less than a mile from the main European railway from Cologne to Frankfurt. It is urged that as the mines are within a day's journey of London, their working would be practically under the direct supervision of the board. One of the lodes has been cut 21 ft. wide, carrying at surface carbonate, red oxide, and phosphate

of copper, while at a depth of only 36 feet the lode is found to be more compact, and increasing in richness. Upon the southern boundary of the concession the lode has just been proved to be large, and carrying rich ore throughout. A parallel lode has been found to be from 6 to 7 ft. wide, composed of red and black oxide and carbonate, phosphate, and sulphure of copper. Another parallel lode was discovered last August, which is described to be of the same character as the St. Josephberg. From the practical evidence which the directors have been able to obtain, they feel themselves justified in stating that they believe the Menzberg Mines will prove equally productive with St. Josephberg and Marienberg. The property has been purchased on most favourable terms, and is to be paid for entirely in shares, so that all the subscribed capital will be used in developing the mines; we are not, therefore, surprised to hear that nearly all the shares have been applied for, and are at a high premium. The share list will close on Tuesday next.

The SILKSTONE FILL COLLIERY COMPANY has been formed with a capital of 50,000l., in 10,000 shares of 5l. each, to acquire a colliery at Silkstone, Yorkshire, containing the best seams of coal for domestic purposes, as well as for the manufacture of gas. It is stated that the colliery has been successfully and profitably worked for some years, the present output being more than 1000 tons per week, although working only half time, pending the settlement of the affairs of the deceased partner, in consequence of whose death it is stated that the colliery has been sold. The managing partner, under whose charge the property has been worked from the commencement of operations, has agreed to take his entire interest in paid-up shares, and also to give the company the benefit of his practical experience as managing director. The property contains a valuable bed of fire-clay, estimated to yield 120,000,000 bricks. A local demand exists for the coal at 10s. to 12s. per ton at the pit's mouth, and a profitable contract is now running for all the coke that can be supplied for twelve months, which is made at the colliery from the small coal. It is proposed to form a sinking fund to recoup the purchase-money during the tenure of the lease, after which the profits are estimated at 9400l. per annum, equal to a dividend of 24 per cent. upon the paid-up capital. By the formation of the sinking fund it is pointed out that, in addition to the dividends paid, the shareholders will at the expiration of nine years (the time it will take to work out the coal at present under lease upon the proposed scale of operations) possess the original purchase-money, to be employed in other properties, including valuable beds of ironstone. The terms of subscription are 10s. per share on application, 2l. on allotment, and 1l. on Nov. 1. In case of further call it has been arranged to give three months' notice, but the colliery being in profitable working further calls are not expected to be required.

The CASTLE GATE TIN MINING COMPANY has been formed, with a capital of 10,000l., in shares of 10l. each, for the purpose of working an extensive tin mining sett at St. Columb, Cornwall. The property is held from the Duchy at 1-18th dues, is situated on the side of a hill, and embraces a tin-bearing elvan of great width and richness, which in the opinion of geologists and mineralogists cannot fail to produce inexhaustible quantities of tin. In addition to the elvan, which has made great deposits in all similar mines, there are over 20 which can be now worked from surface at a very small cost. Capt. Thomas Parkyn reports that the lodes in this mine pass right through Castle-an-Dinas, and are found very rich in that mine. Captain Thomas Brewer, who has been through the mine several times, and seen all the lodes mentioned by Captain Parkyn; some of them are very rich indeed for tin, and will pay well for working. There is now rich work in the end on the north lode. Capt. James King, of Cornubia, has a high opinion of the mine, and believes it will be a profitable one when laid open. Captain John Hore knows these lodes make very rich in the Royalton Tin Mine, which can be seen at any time. And Captain James Hooper never met with the same favourable circumstances of great richness in the lodes, and beautiful strata for economical working. There are thousands of tons of paying tinstuff already laid open to view, which only require stamping to make marketable; and it is now proposed to erect a 30-in. cylinder engine, and 40 heads of stamps, the necessary work for preparing stuff for stamping being made in the meantime. The prospectus will be found in another column.

At the Swansea Ticketing, on Tuesday, 1885 tons of ore were sold, realising 20,560l. 17s. 6d. The particulars of the sale were—Average standard for 9 per cent. produce, 90½ lba.; average produce, 16½ average price per ton, 10l. 18s. 2d; quantity of fine copper, 301 tons 12 cwt. The following are the particulars of the two last sales:—
Date. Tons. Standard. Produce. Price per ton. Per unit. Ore copper.
Aug. 8, 1885 100 10½ 26 11 0 12s. 11d. £64 14 0
Sept. 12, 1885 80 10 10 13 2 13 7½ 68 2 4
Compared with the last sale, the advance has been in the standard 3½ lba., and in the price per ton of ore about 12s. 4d. There will be no sale on Oct. 3.

The allotment letters of the SILVER STAR MINING COMPANY were posted this day.

The shares of the South Aurora Silver Mining Company are 3½ to 3¾ per share.

STRATHDON HEMATITE ORES.

THE PROPRIETORS OF ALLARGUE, in the parish of STRATHDON, and county of ABERDEEN, are prepared to entertain PROPOSALS for a LEASE for RESUMING MINING OPERATIONS in this field.

Application may be made to MILNE and WALKER, Advocates, 16, Union-terrace, Aberdeen.

COLORADO GOLD AND SILVER MINING DISTRICT.

AN ENGLISH GENTLEMAN will shortly arrive in London who has VISITED AND INSPECTED several of these mines, and will be PREPARED TO OFFER some GOOD PROPERTIES at LOW PRICES. Parties desiring to purchase can apply to "A. P.," MINING JOURNAL OFFICE, 26, Fleet-street.

TO MINING ENGINEERS.

A FIRST-CLASS MAN WANTED TO EXAMINE A SILVER MINE IN NEVADA. One acquainted with the geology of the country preferred. Arrangements might be made to remain as Manager. Address, "Silver," Deacon's, Leadenhall-street.

CASHIER, OR MANAGER.

A GENTLEMAN, who has filled his present position as above in a large Manufacturing Concern for the past five years, is OPEN to a NEW ENGAGEMENT. Highest testimonials and references. Security given. Address, "B. S. J.," MINING JOURNAL OFFICE, 26, Fleet-street, London. September 4, 1871.

A MINING ENGINEER, of large experience, OFFERS his SERVICES to anyone requiring REPORTS, VALUATIONS, PLANS, ESTIMATES, or ADVICE of any kind as to the OPENING OUT or WORKING of MINERALS at home or abroad. Address, "C. V. and M. E.," MINING JOURNAL OFFICE, 26, Fleet-street, E.C.

WANTED, A SITUATION, TO TAKE CHARGE OF A LEAD MINE, by one who has had extensive experience, and thoroughly understands Drilling, Mapping, and Assaying, together with every other branch connected with Mining. Testimonials and references can be produced from high authorities. Address, "A. B. I. O.," Times Office, Douglas, Isle of Man.

[The Advertiser knows of a VALUABLE PIECE OF MINERAL GROUND on the island, which he could secure; but, as he requires some little assistance, would like to correspond with parties who are disposed to assist in its development.]

WANTED, A SITUATION as VIEWER or RESIDENT VIEWER. Can be well recommended by several leading Mining Engineers. Address, "T. A.," MINING JOURNAL OFFICE, 26, Fleet-street, London.

WANTED, by a Gentleman who has an extensive acquaintance with Birmingham manufacturers, a COMMISSION for the SALE of COPPER, SPelter, TIN, and TIN PLATES. Apply by letter to "M.," New Club, Birmingham.

WANTED TO LET, immediately, in the Parish of Harberton, near Totnes, Devon, PART of a NEW SLATE QUARRY (called Hardy's Dattins), according to arrangements as may be agreed upon. Quality very superior, of dark blue rock. Sole lessee, Miss Catherine Hardy. The proprietor, Mr. R. J. Hardy, will grant an additional lease for any period the company wish. Address, Miss CATHERINE HARDY, or Mr. R. J. HARDY, Merchant, Harberton, near Totnes, Devon.

ZINC AND LEAD ORES.

I AM PAYING as follows:—
BLENDE.—135s. for 63 units of zinc, deducting 3s. 5d. per unit below.
CALAMINE.—10s. more than for blende.
LEAD-SILVER ORES.—215s. for 85 units of lead, deducting 3s. 3d. per unit below, all the silver being paid extra 5s. per ounce troy.
ZINC AND LEAD ORES MIXED TOGETHER.—Very high prices.
The above prices are fixed for a ton (20 cwt.) of ore, f.o.b. at Antwerp.
I BUY any quantities, however large, contracting for as many years as desired. Particulars by letter.
ARMAND FALLIZE, Ingénieur, à Liège (Belgium).

FOREIGN TIN BY PUBLIC TENDER.

ABOUT 7000 to 8000 Slabs of STRAITS and MALACCA TIN more or less about THREE HUNDRED TONS, WILL BE SOLD on WEDNESDAY, the 20th inst., by PUBLIC TENDER, in Lots of Ten Tons each, by—
HENRY BATH AND SON,
62, Gresham House, London, E.C.
Full particulars and forms of tender can be obtained from HENRY BATH AND SON on and after the 15th inst.

Royal School of Mines.

ROYAL SCHOOL OF MINES.
DIRECTOR,
Sir RODERICK IMPREY MURCHISON, Bart., K.C.B., F.R.S., &c.
During the TWENTY-FIRST SESSION, 1871-72, which will commence on the 2nd of October, the following COURSES OF LECTURES and PRACTICAL DEMONSTRATIONS will be given:—
1.—CHEMISTRY By E. FRANKLAND, Ph.D., F.R.S.
2.—METALLURGY By JOHN PERCY, M.D., F.R.S.
3.—NATURAL HISTORY By T. H. HUXLEY, LL.D., F.R.S.
4.—MINERALOGY By WARINGTON W. SMYTH, M.A., F.R.S.
5.—MINING By A. C. RAMSAY, LL.D., F.R.S.
6.—GEOLOGY By A. T. M. GOODFELLOW, M.A.
7.—APPLIED MECHANICS By FREDERICK GUTHRIE, F.R.S.
8.—PHYSICS By the Rev. J. HAYTHORNE EDGAR, M.A.
9.—MECHANICAL DRAWING, by the Rev. J. HAYTHORNE EDGAR, M.A.
The Fee for Students desirous of becoming Associates is £30 in one sum, on entrance, or two annual payments of £20, exclusive of the Laboratories. Pupils are received in the Royal College of Chemistry (the Laboratory of the School) under the direction of Dr. Frankland, and in the Metallurgical Laboratory under the direction of Dr. Percy.
Tickets to separate Courses of Lectures are issued at 2s. and 4s. each. Officers in the Queen's Service, Her Majesty's Consuls, Acting Mining Agents, and Managers, may obtain Tickets at reduced prices. Science Teachers are also admitted to the Lectures at reduced fees. His Royal Highness the Prince of Wales grants Two Scholarships, and several others have also been established by Government.
For a prospectus and information, apply to the Registrar, Royal School of Mines, Jermyn-street, London, S.W. TRENHAM REEKS, Registrar.

King's College, London.

DEPARTMENT OF APPLIED SCIENCES.
NEW STUDENTS will be ADMITTED on TUESDAY, October 3. The course of study provides a system of practical education for young men who intend to engage in Engineering, Surveying, Architecture, and the higher branches of Chemical and Manufacturing Art.
This department has attached to it a Workshop, also Chemical, Physical, and Photographic Laboratories.
Two Exhibitions of £30 and £21 will be given at the commencement of the Michaelmas Term, by competitive examination amongst the Students matriculating at that time. The subjects of examination will be Arithmetic, Algebra, Geometry, Trigonometry, and Mathematics applied to Mechanics.
For information, apply personally, or by post card, to—
J. W. CUNNINGHAM, Esq., Secretary.

TECHNICAL EDUCATION

SCIENCE AND ART DEPARTMENT.
ROYAL COLLEGE OF SCIENCE FOR IRELAND,
STEPHEN'S GREEN, DUBLIN.
SESSION 1871-72.

This College supplies, as far as practicable, a complete Course of Instruction in Science applicable to the Industrial Arts, especially those which may be classed broadly under the heads of CHEMICAL MANUFACTURES, MINING, ENGINEERING, and AGRICULTURE.

A Diploma of Associate of the College is granted at the end of the Three Years' Course.

The Course of Instruction is recognised by the Secretary of State for India as qualifying for Appointments in the Engineering Department.
There are Four Royal Scholarships, of the value of £50 each yearly, with free education, including Laboratory Instruction, tenable for two years. Two become vacant each year. They are given to Students who have been a year in the College. There are also Nine Exhibitions attached to the College, of the yearly value of £50 each, with Free Education and Laboratory Instruction, tenable for three years. Three become vacant each year. These are awarded at the Annual May Examinations of the Science and Art Department.
The fees are £2 for each Course, or £10 for all the Courses of each year, with the exception of Laboratory.

The Laboratory Fee is £12 for the full Course of nine months, or £3 per month.

SUBJECTS OF INSTRUCTION.

Applied Mathematics, Mechanism and Machinery, Descriptive Geometry, Geometrical, Mechanical, and Engineering Drawing, Experimental Physics, Chemistry (Theoretical and Practical), Botany, Zoology, Geology and Palaeontology, Mining, Surveying, Agriculture.

The Laboratory is open for Instruction in Practical Chemistry, Metallurgy, and Assaying from Ten to Four o'clock every weekday during the Session, except Saturdays and holidays.

The Session commences on MONDAY, October 2.
Programmes may be obtained on application to the Secretary, Royal College of Science, Stephen's Green, Dublin.
FREDERICK J. SIDNEY, LL.D., Secretary.

GEOLOGY.—TWO CABINETS FOR SALE, containing 6000 specimens of MINERALS, ROCKS, and FOSSILS; scientifically arranged. Price, 3000 guineas.
Apply to Professor TENKANT, F.R.G.S., 149, Strand, London, who has also elementary collections at 3, 8, 10, 20, to 100 guineas each.

WATER WHEEL.

WANTED, CAST-IRON AXLE AND RINGS for WATER WHEEL. Diameter of wheel, from 20 to 25 ft.; width, 4½ to 5½ ft. Address, stating new or secondhand, price, and particulars, to KEMBER and Co., Clarendon Grove, Drummond-street, London.

FOR SALE, A 24-in. cylinder WHIM ENGINE, with drum, and 10-ton BOILER, in first-rate condition, in Cornwall. For particulars, apply to Mr. MATTHEW GREENE, 14, Pinner's Hall, London.

IRISH MINES.—The Holder of a LICENCE of a COPPER MINE, in the county of COCK, wishes one or two others to JOIN HIM in RE-OPENING IT. The site is large, containing ten copper lodes, five counter lodes, and a quartz lode, yielding an average of ounces of gold per ton. The copper ores sold were from 10 to 20 per cent. produce. Address, "C.," care of W. H. Smith and Son, Advertising Agents, No. 79A, Market-street, Manchester.

WEST CHIVERTON MINE.—SHAREHOLDERS.—Do not be misled as to the position and value of your property. Ascertain all truth by communicating with Mr. WOODWARD, Truro.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Sept. 12	Great Laxey	100	£21 2 6	Sheldon, Bush, & Co.
—	Powell United	33	11 0	Burry Port Company.
12	Maes-y-Safu	15	11 0	Adam Eytton.
—	ditto	9	11 0	ditto
14	Talargoch	20	12 10 6	ditto
—	ditto	109	12 13 6	Walker, Parker, & Co.
—	ditto	80	12 13 6	ditto
—	Trilogan	45	12 6 6	ditto
—	Holywell Level	20	11 0	A. Eytton.
—	Halkyn Deep Level	20	11 0	Walker, Parker, & Co.
—	Dylliffe	53	10 17 6	ditto
—	Wagstaff	21	10 0	ditto
—	Ashton	20	11 0 6	A. Eytton.
—	North Hendre	15	11 15 0	Walker, Parker, & Co.
—	ditto	10	13 15 6	ditto
—	Gladstone	5	11 2 6	A. Eytton.
—	North Henblas	14½	10 6	Walker, Parker, & Co.
—	Roman Gravel	125	12 0 6	Burry Port Company.

BLENDE.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Sept. 12	Talargoch	60	£17 9	Bagillt Smelting Co.
—	ditto	60	18 0	Tindale Speiler Co.

BLACK TIN.

Date.	Mines.	Tons c. q. lb.	Price p. ton.	Amount.	Purchasers.
Sept. 5	Perran Consols	4 14	27 17 6	£121 8 11	—
—	ditto	0 7	17 0	63 12 6	—
—	Penhalls	9 4	25 0	225 0 0	—
6	Terra	2 3	4 0	472 14 6	Williams.
9	Son. Consols	16 13	12 12	239 14 0	Boltho.
15	Leeds & St. Aub.	4 11	2 6	246 3 6	ditto

THE CASTLE GATE TIN MINING COMPANY (LIMITED).

Capital, £10,000, in 1000 shares, limited to £10 each.

The first payment is £2 per share, which must be made on application for shares, and no call will be made before the expiration of three months from this date.

Taking into consideration that large returns of tin can be immediately made, it is not thought that more than £5 per share will be required to be called up. Priority of allotment will be given to applicants desirous to pay up in full, and dividends will be paid *pro rata* on the amounts paid.

DIRECTORS.

DR. THOMAS PHILBRICK, College Road, Brighton.
CAPTAIN H. BULKLEY, late H. M. A.
CAPTAIN G. BEAMISH, Corinthian Club.
DR. WM. MORRIS, Tyndall Place, Islington.
JOHN NEWCOMB, Esq., Westmoreland Road, Bayswater.

THE CONSOLIDATED BANK (LIMITED), 32, Threadneedle Street.
THE SOUTH CORNWALL BANKING COMPANY, St. Austell, Cornwall.

Messrs. LAING, EVANS, AND CO., 10, John Street, Bedford Row.

BROKERS.

THE LONDON STOCK AND SHARE AGENCY, 165, Strand, London.

JOHN FOX FARRIDGE, Esq., 3, Winchester Buildings, City.

OFFICES—3, WINCHESTER BUILDINGS, LONDON, E.C.

PARTICULARS AND PROSPECTUS OF THE CASTLE GATE TIN MINING COMPANY (LIMITED).

This extensive tin mining set is held under licence from the Duchy of Cornwall (Prince of Wales) for 21 years, at a royalty of 1-18th due on all ores sold. The mine is situated in the parish of St. Columb, on the side of a hill, and the surface working has been of a most extensive and extraordinary character by the ancients, and from which, at remarkably shallow levels, immense profits have been realised. It is a tin-bearing elvan of great width and richness, and which, in the opinion of geologists and mineralogists thoroughly conversant with this peculiar district, cannot fail to produce inexhaustible quantities of tin. This district has for ages been celebrated for tin streaming. So rich are the lodes in this and other mines adjoining that pure tin has been washed away from these hills into the valley, where it has been gathered by the old miners. It is now proposed to erect a steam-engine, 3-1/2 in. cylinder, and 40 heads of stamps, and during the erection of which the levels will be cleared, and very large quantities of rich tin ore raised, ready to be stamped and sent to market. Therefore, no time will be lost to the shareholders in obtaining the profitable result of the working.

The following are reasons why the mine can be recommended:—
1.—It is on a hill, and can be worked without expensive sinking for several years.

2.—It is a rich tin-bearing elvan, which has made such great deposits in all similar mines.

3.—There are thousands of tons of paying tinstuff already laid open to view, and only require stamping to make marketable.

4.—There being but 1000 shares in the company, and the amount of capital being small, the dividends will be proportionately large.

5.—There are over 200 lodes of tin, besides the elvan, which can be worked now from surface at a very small cost.

6.—It is capable of making such large returns of tin that dividends must result in a few months from the present time, thus avoiding the great delay and anxiety so frequently met with in the re-working of old abandoned and deep mines.

7.—The mine is now at work, therefore shareholders will enter a going concern.

Taking all the surrounding circumstances into consideration, it is one of the most favourable opportunities of investing ever offered, and it is admitted by all metal brokers that tin, through the falling off of supplies from the Eastern Archipelago, and the increased demand for the metal, must command higher prices than at the present moment.

Prospectuses and forms of application for shares, and detailed agents' reports, may be had of the Secretary, Brokers, or Bankers of the company. As considerably more than half the capital has been privately subscribed for, early application for shares is necessary to secure an allotment.
London, September 15, 1871.

THE MENZENBERG MINING COMPANY (LIMITED).

Registered under the Companies Acts, 1862 and 1867, by which each member's liability is limited to the amount of his shares.

Capital £63,000, divided into 12,000 shares of £5 5s. (35 shs.) each.

£1 per share is payable on application, £2 on allotment, and the balance in six months from the date of allotment.

Where no allotment is made, the deposits will be immediately returned in full.

The mining grants are held in perpetuity from the Crown of Prussia, subject to a royalty of 2 per cent. only on the ore raised.

The following will be the future Board of—

DIRECTORS.

JOHN BIRD, Esq., J.P., Wynshaw House, Fulham.
RICHARD COURTNEY, Esq., Beechcroft, Sevenoaks.
THOMAS DICKINS, Esq., J.P., Doughton Park, Manchester (Chairman of the Silk Supply Association).
MAJOR GILMAN, J.P., Vine-court, Sevenoaks (Director of the London Val de Travers Asphalt Paving Company).
ELLI LKES, Esq., J.P., Werneth Park, Oldham, near Manchester (Director of the Globe Marine Insurance Company).
WILLIAM WATSON PROLE, Esq., 11, Blomfield-terrace, Westbourne-terrace.
GEORGE WILLIAMSON, Esq., 2, East India-avenue, London.

BANKERS.

Messrs. ROBERTS, LUBBOCK, and Co., Lombard-street, London; and the MANCHESTER AND COUNTY BANK (Limited), Manchester.

BROKERS—Messrs. ST. ALPHONSE and HALLS, 75, Old Broad-street, London.

SOLICITOR.

A. S. CROOME, Esq., (Messrs. Courtney and Croome), 9, Grace-church-street, London.

AUDITOR.

Mr. SAMUEL SLATER, 36A, Moorgate-street, London, Public Accountant.

SECRETARY (pro tem.)—Mr. WM. WILBERFORCE BIRD.

OFFICES—20, GREAT WINCHESTER STREET, LONDON, E.C.

PROSPECTUS.

This company is formed for the purpose of purchasing and working the Menzenberg Mine, adjoining the celebrated St. Josephberg and Marienberg Copper Mines, which have paid in dividends more than £1,500,000 sterling, and that from working on a comparatively small part of their lodes at a shallow depth. All the lodes which have been so immensely productive in those mines have now, as appears by the reports accompanying the prospectus, been proved to run through this property. It is about two miles from east to west, and more than a mile from north to south, and is situated about one and a half mile from the right bank of the Rhine, and three-quarters of a mile from the railway station at Honner, on the main European railway from Deutz (Cologne) to Frankfurt. The roads are excellent, the facilities for carriage unusually good, whilst skilled and ordinary labour, coal, and wood are abundant and cheap. The mine being within a day's journey of London its working will be practically under the direct supervision of the Board.

One of the lodes has been cut in the vineyard of Menzenberg, where it is 21 ft. wide, and at the base of the lode, red oxide, and phosphate of copper, while six lachters (a lachter is 6 ft. 10 in.) deeper the lode is more compact, and contains a much larger quantity of copper ore than at surface. This lode has, within the last few weeks, been opened up on the southern boundary of the concession, where it is large, and carries rich ore throughout. A shaft has been sunk on a second and parallel lode, about three lachters from the southern boundary, where it is 6 to 7 ft. wide, and composed of red and black oxide, carbonate, phosphate, and sulphates of copper, imbedded in spar. This lode again appears in the Menzenberg Hotel Garden, 300 lachters further north, where it is 8 to 10 ft. wide, and carries ore at surface, and is again met with in the Zieklberg Vineyard, 500 lachters still further north.

In an adjoined concessio to the east of Menzenberg Hotel, a parallel lode was discovered on the 17th of August last, which is precisely of the same character as in St. Josephberg, and as it is being driven on northward into a high hill, will probably produce large returns of ore without machinery. Similar results may be expected from another lode about 40 lachters west from that last referred to, and which would be intersected by the same adit. Four large and rich lodes lie between the last-mentioned lodes and the two first referred to.

The stratum is identical with that of the St. Josephberg and Marienberg Mines, and an assay of four specimens of the ore of the former, made by Messrs. Johnson and Sons, Assayers to the Bank of England, gives the following results:—

No. 1 lode	.....	Fine copper	.....	50-60 per cent.
No. 4 lode	.....	ditto	.....	23-40 "
Deep adit	.....	ditto	.....	10-40 "
Deep adit	.....	ditto	.....	17-10 "

thus proving the very rich quality of those lodes.

Before the continental war Professor Forbes, F.R.S., and Capt. Thomas Rickard made the reports accompanying the prospectus, which were laid before the directors, who, however, before introducing this enterprise to the public under the sanction of their names, required further explorations to be made, and some of them, under an arrangement with the proprietors, provided the necessary funds for that purpose. The satisfactory result of these operations is summed up in the reports of Mr. Thos. Rosewarne, of London, and Herr Obersteiger Mühlenbein, the manager of the St. Josephberg Mine, and the directors confidently expect, upon the highest authority, that the Menzenberg Mines will prove equally productive with the St. Josephberg and Marienberg Mines.

Considering the vast extent of the mining ground, also what has been done to prove the lodes, and that the property is held in perpetuity at royalty of only a fifth, whilst the average royalty in Cornwall is a fifteenth, the leases generally for only 21 years, and the ore pure in comparison with that raised from the St. Josephberg and Marienberg Mines, the purchase of the property has been arranged on most favourable terms, the consideration being 8000 paid-up shares (to rank for dividend only in proportion to the amount called up on the other shares)—so that all the subscribed capital will be devoted to the purposes of the company.

Applications for shares may be made in the form accompanying the prospectus, and should be left at the company's bankers in London or Manchester.

The memorandum and articles of association, agreement, reports, concessions, and maps, &c., can be seen at the offices of the company, where, and at the bankers, brokers, and solicitors, prospectuses and forms of application for shares can be obtained.

THE MENZENBERG MINING COMPANY (LIMITED).

Notice is hereby given, that the LIST OF APPLICATIONS FOR SHARES WILL CLOSE ON TUESDAY NEXT, the 19th instant.

W. W. BIRD, Secretary.

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be kept on receipt: it then forms an abridgement of the work of reference.

SIR.—Has the purser of a mine power to discharge an agent in the mine without consulting the proprietors, or is it a legal notice when part of the month is expired?—X. Y. Z.

SIR.—Will any correspondent or engineer make known in this Journal the most approved means of adapting the flues of sea-going steamers for the consumption of either anthracite or bituminous coal, so as to be able to consume whichever is to be had cheapest when required either at home or abroad? Do the American steamers prefer using the anthracite coals because they are found to answer better, or do they use the bituminous coals also?—INQUIRER.

ALUMINIUM GOLD.—As the alloy of aluminium and copper to which this name is given appears to be coming largely into use, I should be glad to learn the price per pound at which it can be purchased in thin plates—say, 50 to the inch thickness; and whether the nature of the alloy permits of its being brazed together like commercial copper, or what solder should be used? I have used copper for a purpose to which I think I could apply aluminium gold.—K. C.

OXIDE OF IRON.—Will any reader of the Journal kindly inform me the current value of this mineral delivered in South Staffordshire? By analysis it contains about 12 to 15 per cent. of iron, is raised and got in a limestone district, and has properties congenial for helping other ores to flux.—Y. G.

MINING IN COLORADO.—I see in the Journal of Saturday mention of two mines in Colorado—the Kansas and the Seaton—that companies are being formed to work, and I am glad to find that English capital is to be invested in that part of the country. I have only a few days returned from that place, having left Central City on Aug. 15, after four years' tour through all the mining districts of Colorado yet opened up, and I shall be happy to give information on the mines of that country to any persons investing therein in answer to letters through the Journal.—H. B. GOSSE, St. Austell, Cornwall, Sept. 12.

WHEAT AGAR.—I should like to know from some one connected with the working of this mine, how they have been sinking, what sum of money has been expended, what discoveries have been made, and the probable further outlay required to put the mine in a state to pay its way, supposing a lode worth 75s. per fathom is at hand.

NOMINAL CAPITAL.—"New Chum."—When vendors receive 10,000, in shares as part of the purchase money out of 50,000, capital, in 100 shares, the real number of shares offered and subscribed for by the public is 4000, while 1000 go to the vendors, leaving 40,000, minus the cash payment, for working.

PACIFIC.—In Capt. Pringle's report, which appeared in last week's Journal, for "No. 3 stop, the ledge is 13 feet thick," read 18 inches.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

SCALE FOR ADVERTISEMENTS.—Our charge for general advertisements is—for six lines and under, 4s.; per line afterwards, 8d. Average, 12 words per line.

* With this week's Journal a SUPPLEMENTAL SHEET is given, which contains—Original Correspondence: Awful Explosion at the Moss Colliery, Wigan; Coal-Cutting Machinery (W. Leatham); Our Fuel Supply—Compressed Peat; Commercial Tintines; American Mining Speculation (H. H. Roche); American Mines, and English Capital; the Times, and Mining on the Pacific Coast; Cape Copper Mining Company (M. Woodfield); Swansea Smelting and Silver Mining Company; Gases in Metallic Mines (A. Francis); Tributaries' Ores; Mines of Cardiganshire, and their Inexhaustible Treasures (A. Francis); Undeveloped Mining Districts (R. Symonds); Scientific Mining; Myndyddorddu Mine, Cardiganshire—Excursion of the Iron and Steel Institute—Llithelau Iron and Coal Mines, Salop—Foreign Mining and Metallurgy—Foreign Mines Reports, &c.

THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, SEPTEMBER 16, 1871.

THE NEW FACTORY AND WORKSHOPS ACT, AND MINING AND TECHNICAL EDUCATION.

Those who have attentively watched the course of legislation for the past few years can scarcely fail to have been struck with the evident desire of the Government to meet the demands of the working classes. The unity and fixedness of purpose which have characterised the various trade unions and combinations throughout the country has made the working classes an appreciable power, and the legislation of the past few years has not only imparted additional strength thereto, but is rapidly giving an importance to the claims of labour which enables the working classes to make demands which a few years since would have been considered preposterous and absurd. Whilst we would not ignore the rights of the mechanic, the artisan, and the labourer, believing they have the most perfect liberty to obtain the highest rate of wages which their skill and talents will command, we contend that the large manufacturers and capitalists have rights and claims which should not be overlooked, and that the continued prosperity and commercial industries of the country depend quite as much upon the enterprise and judgment of the employers as upon the ever-advancing claims of the working men. The tendency of modern legislation has been to interfere too much between employers and their operatives; it has imposed restrictions and difficulties in the carrying on and development of manufactures inimical to the welfare of the country, rather than allowing the producers of the staple trades to manage their own internal affairs, in accordance with their own requirements, of which they themselves must assuredly be the best judges. The Workshops Regulation Act and the Factory Act, of 1867, are instances of the truth of the remarks which we now make, the attempt to carry out which met with such universal opposition, and the practical operation of which, to say the least, was most partial and unsatisfactory in its effects.

The Act passed during the session just brought to a close to amend the Factories and Workshops Act of 1867 is, undoubtedly, a step in the right direction. It removes many of the most serious objections to the first measures, gives manufacturers more power to meet the exceptional and pressing exigencies of their trades, relieves local authorities from the responsibility of seeing the provisions of the Act enforced, entrusting this to the Factory Department, and in many other respects will be far more acceptable to the country than the previous attempt at legislation in this direction. The law attempts to regulate the hours of labour in both workshops and manufactures—in plain language, stripped of the verbiage which always surrounds imperial enactments, it says how many hours per week young persons shall work, and how many hours they shall not work, no matter how pressing the contracts on hand. No matter whether the young mechanic, the operative, or the labourer is desirous of working or not, whether the whole work of the factory or workshop depends upon his continuing work or not, the law says relaxation is necessary, and he shall have it *volens volens*; and many artisans are thereby driven to the drinking shop when otherwise they would be industriously occupied, to their own advantage and the interest of employers. Many of the newspapers, both metropolitan and provincial, give their support to the new Act, but the editors know little of the exigencies and requirements of our large staple manufactures and industries, or they would see that a too stringent interference between the employers and employed in respect to the hours of labour is a dangerous precedent, and if pushed to extremes likely to produce results anything but satisfactory.

Whilst we contend that this continual interference on the part of the Legislature with the staple manufactures of the kingdom is a most questionable policy, there are features in the new measure which commend themselves to the favourable consideration of all. The relaxation of the very stringent provisions of the previous measures, and the transferring the administration of the law from vestries and local boards to the Factory Department, are so far good in themselves. Nor do we say there are not cases in which the young are excessively overtasked, and the hours of labour unreasonably long, permitting no opportunity either for physical or mental development and cultivation. In such cases there is fair ground for legislative interference; but whilst Government says, on the one hand, that the young shall not work more than a certain number of hours per week, that certain hours shall be had for relaxation and mental culture, has provision been made by the Legislature for the working classes—the mechanic and the operative—to have the full benefit derivable therefrom? We are about to enforce compulsory education, and rightly so, but where are our mining schools and our scientific

classes, where the young and rising could receive a proper mining or technical education, fitting them for the after duties in life? Are not the Government most lax in carrying out duties and responsibilities which should properly devolve upon them? Schools are to be provided at the public expense for the teaching of reading, writing, and arithmetic, why should not the necessary rudiments of a mining and scientific education be as easily within the reach of those who need such instruction? Could not some most excellent lessons be taken from the Continent and from America, where such schools are within the reach of all? Is it not a somewhat invidious and painful reflection upon our past educational career and our present status as a nation that in very many of our large manufacturing, requiring chemical analysis and scientific manipulation, the principal and more remunerative departments are filled by German or continental chemists? In the smelting and treatment of ores, in the manufacture of chemicals, and the make of other articles requiring more than usual scientific skill and knowledge, the first and more important processes are carried out by gentlemen who have been educated in such departments in the German or continental mining schools. Such things ought surely not to continue. The nation ought to be able to educate its own scientific men; and some such steps as those adopted on the Continent should be taken if we would keep up Old England's prestige for her manufactures and her sciences. Our Parliament is assuredly not doing its duty in this most important department, and our colliery proprietors and large manufacturers who represent us in the House of Commons will pardon us in saying that they are somewhat remiss in not pressing the claims of mining and scientific schools upon the serious attention of the Government.

It has been said that the history of our legislation, so far as the Factory Acts are concerned, has been a constant and steady succession of triumphs over ignorance. Such may be the case, but whilst the Legislature, on the one hand, appears exceedingly anxious to interfere between employer and employed, and enforces hours of relaxation for the workmen, and prohibits young persons from working during certain hours, let opportunities be afforded for taking advantage of this relaxation for mental culture and scientific education. If the Factory and Workshops Act be a boon to the working classes, let it be supplemented with the establishment of mining schools and scientific educational establishments throughout the land, and then our colliers, our engineers, our scientific artificers, and our manufacturers generally, will have an appreciable value of the efforts of the Legislature to improve their social and intellectual status. We trust now that the Government has taken upon itself to legislate on behalf of the working classes it will also consider it a duty equally incumbent upon them to provide mining schools and scientific institutions, where such an education shall be received as will fit our operatives to more ably discharge the duties which devolve upon them.

THE DISPUTES IN THE IRON AND COAL TRADES.

Disputes between the employers and employed in the ironworks and collieries in nearly all parts of the kingdom as to wages and working hours appear to be on the increase, and are assuming quite a chronic character. The engineers' strike at Newcastle-on-Tyne has been followed by others at Leeds, Sheffield, and other places, and where demands have been allowed they have been conceded, in some instances at least, because contracts were in hand that must be completed within a certain time. Ironmasters and engineers have to meet in the continental and other markets foreign producers of the same material, who have the great advantage of a plentiful supply of cheap labour. Consequently, contracts are entered into by English manufacturers at prices in which the existing rate of wages paid by them is an important consideration, and it, therefore, follows that any increase in payments to workmen on orders in hand must have the effect of reducing, if it does not altogether absorb, the fair profit to which the master is entitled. The effect must also be to the benefit of the foreigner, and tending to decrease home orders and lower the rate of wages. Shortening the hours of labour is, of course, equivalent to raising wages.

It is true that of late the iron trade has been exceptionally good, as have the wages of workmen, and it is worthy of the serious consideration of our skilled labourers what will be the result if in every brisk season a demand without notice is to be made for an increase of wages. Such a state of things would not only increase the numbers of persons engaged in any employment where wages were being constantly raised, but in the end send a very large portion of the work into other places where labour was cheap and strikes unknown, or be the means of converting unskilled into skilled labour. Then, the law of supply and demand would soon settle the scale of payment. At Newcastle-on-Tyne a large body of German and other foreign workmen have been introduced, and although it is probable that a large proportion of them may be induced to leave, yet a great number will remain and settle in this country, cause others to come over, and will greatly increase the number of persons engaged in the iron trade. With excess of labour over the requirements for it—and the present prosperity cannot be ensured—we may have before long a slack season, when we shall have little work and less prices, a state of things for which the workmen will to no small extent have themselves only to blame.

At Leeds the strikes have in most instances been successful, and the men have succeeded in diminishing the moderate profits of their employers on the work in hand, one firm alone losing at least 60% per week. Discontent is also manifesting itself in Sheffield, and before long we may hear of some dispute in that important centre of the steel and iron industries.

The colliers in nearly all parts of the kingdom are in an agitated state, and the strike made by those in South Wales has been followed by an almost general demand for an increase of wages. The earnings of the coal miners in England and Wales are now upwards of 16,000,000, annually, so that an increase to the extent of 10 per cent. would amount to the very large sum of 1,600,000, and, if a general rise in the price of coal to that extent were made, it is more than probable it would seriously interfere with the trade. At the present time a large quantity of coal is sent to various parts of the world, our exports being fully equal to one-tenth of the entire production. France, Russia, Prussia, and the East Indies are amongst our best customers, whilst we also send into Belgium as well; but, as in all those countries there are vast fields of coal, any sensible advance in the price of that mineral would have the effect of stimulating their development, so that in a few years they would be able to supply their own wants, and ultimately that of their neighbours, now dependent upon us.

The strike in South Wales has placed the men there in by no means an enviable position, for great numbers of them will scarcely ever attain the comfortable position they enjoyed before it commenced, whilst others have left their homes forever. The suffering and privation endured have been great, and the loss in physique, and the demoralisation of families, will be food for serious reflection long after the strike has terminated. The loss to the owners has also been heavy, having to keep their pits in a good state, as well as the machinery, besides having their capital lying idle—a proof in itself that the colliery proprietors, as a body, did not feel justified in conceding the demands asked for. It is true that the coal trade is in a rather healthy state, but it must be remembered that there are few businesses in which the competition is so keen, seeing that 1d. or 2d. per ton is the greatest consequence. This was forcibly shown in the recent battle between the Midland and Great Northern Railway Companies, when the difference of about 6d. in the conveyance of a ton of coal a distance of 160 miles led to a loss to the combatants of over 150,000. The reduction of the rate has greatly improved the South Yorkshire coal trade, in consequence of which the miners in that district are now asking for an advance of 5 per cent., which most likely will be granted without any interruption to business.

In the Forest of Dean also the men have been offered the advance asked for, but other demands not so easily conceded have led to the men remaining out on strike; but it is evident that almost any day may see an amicable settlement. The colliers in some parts of Lancashire have also been successful in obtaining a rise of 10 per cent. without turning out. It is, therefore, evident that masters will always be found willing to meet their men on the question of wages when practicable, and that the latter have no need in their own

terest to resort to a strike—a system which is opposed to the principle of free trade in labour, as much as it is to the real interests and independence of the deserving workmen.

THE COAL TRADE OF BIRKENHEAD.

This branch of Birkenhead business is, upon the whole, increasing in importance; and the financial position of the Mersey Docks and Harbour Board has been materially benefited by it, as the long useless Birkenhead portion of the estate of the board has been utilised to some small extent for the shipment and movement of coal. In 1860 the Great Float at Birkenhead was opened, and the export coal trade was removed to that locality from the Morpeth and Egerton Docks, where previous to that period coal had been shipped. The arrangements for the trade have been improved; since it was first opened three staiths for the shipment of coal on the hydraulic principle have been erected, and have gradually come into general use for small-sized vessels, of 500 tons and under; but larger vessels, as a rule, still load by the barrow system. In September, 1863, the Great Low Water Basin at Birkenhead was opened, and enabled vessels of the largest tonnage to enter the Float on any tide, either neap or spring. The great northern deep water entrances into the Float from the river were opened in 1866, and completed the facilities for ships of the largest tonnage entering and leaving the Great Float on any tide with full and complete cargoes. The quantities of coal brought to Birkenhead by railway in the ten years ending with 1870, inclusive, were as annexed:—

The receipts of coal at Birkenhead have thus, upon the whole, very greatly increased of late, and it is noticeable that they have far outstripped the exports, which only expanded as follows in the ten years:—

The local consumption of coal at Birkenhead would thus seem to have greatly increased in the ten years both for industrial and domestic purposes; the demand for steamers has also grown with the general progress of steam shipping enterprise. It is noticeable, however, that no increase has taken place in the foreign export coal trade of the Mersey during the last ten years, the exports foreign year by year having been as follows:—

The aggregate foreign exports year by year were thus (although the total for 1870 shows a decline as compared for 1861, it presents some advance upon that for 1855, which amounted to 406,561 tons):—

The exports would accordingly appear to have been progressively declining for the last five years, and Liverpool (which must be taken to include Birkenhead for the purposes of the comparison) appears at a disadvantage in the matter of her export coal trade when contrasted with Newcastle, Cardiff, and Sunderland. Thus the total exports from the four ports were as follows in 1866, 1868, and 1870:—

This comparison does not, however, affect the fact that the coal trade of Birkenhead is increasing in importance upon the whole. Thus the quantity of coal tipped at Birkenhead in the last five years was as follows:—1866, 311,639 tons; 1867, 530,793 tons; 1868, 549,401 tons; 1869, 480,817 tons; and 1870, 425,248 tons. The greater part of this coal was tipped by the Mersey Docks and Harbour Board. The past year was a dull one for the Birkenhead coal trade, and the statistics which we have cited reflect many fluctuations. Still the general course of Birkenhead business is decidedly upwards, and this year's statistics are expected to present a sensible improvement.

THE COLLIER—AS HE IS PAINTED, AND AS HE IS.

Although the working men have of late years found great favour with statesmen and advanced politicians, still there is one important section that has not had quite so much justice done to it in its social characteristics as it is really entitled to. It has been the fashion to describe the working collier as the lowest type of the *genus homo*, and he has furnished material for the cartoons of "Punch," as well as for highly flavoured articles from special correspondents of the daily press, no doubt to the great delectation of those who only know a colliery by name, and as a place where coal was got by some means or other. Those caricatures and articles are the work of men of talent, who for the most part reside far away from the scenes which they depict, whilst the knowledge obtained is generally from a casual visit of a day or two on the occurrence of some great mining fatality. During their brief visit, however, they generally see what persons residing in the place for half a century have never seen, and it is to be regretted that such palpable exaggerations with regard to a body of men engaged in the most dangerous of our industries should receive the ready credence they do. It is true the collier, from the nature of his employment, and his blackened face, does not look a particular interesting subject, but we may say with truth, that—

"—the devil is not so black,
As what some people paint him."

Perhaps of all the gross exaggerations perpetrated at the expense of the collier, nothing has in any way equalled that which appeared not so very long ago from the special correspondent of a London daily paper, boasting "the largest circulation in the world." So extraordinary, indeed, was the story of the correspondent that it formed the staple of a rollicking "leader" in the same paper. The writer of the letter, in the first instance, in noticing the South Yorkshire collier, said he was a man particularly fond of the most expensive things, some wearing those worth 50*l.*, with gold chains to match. He also kept his hounds, for he was a great sportsman; and on Sunday he was in the habit of going in a cab to see his keeper and visit his grounds. The personal "get up" of the collier was only equalled by his profuse and wasteful style of living, and the costly cookery of his wife, for his beefsteaks were fried in butter, and his game and larger joints in a corresponding manner. His wife, in making tea, so saturated them with fat that it ran down the oven in some-thing like a stream. Such was the picture drawn of the South Yorkshire collier by a writer in a daily paper in the metropolis, and, no doubt, believed in by a large majority of the readers of "the largest circulation in the world." But what are the actual facts? The South Yorkshire collier is amongst the most provident and intelligent of the body he belongs to in the kingdom, and dresses decently, as was testified by Lord Elcho at Barnsley, when 9000 of his mates walked in procession. He is anything but partial to jewellery, and those who know him would as soon expect to find a ring—more especially a valuable one—in his nose as on his finger; and he cares not for gold guards, but likes a useful silver watch. Rising to go to work about 4 o'clock in the morning, for he often has to walk three or four miles to the pit, he has his breakfast, and starts off with a tin of coal tea and a crust of dry bread as his fare until the labour of the day is finished. Returning home, he washes and has his dinner—a substantial meal, without any extra gastronomic aids, for owing to the nature of his employment he is endowed with a sharp appetite for meat, lean and good. As a rule, his wife is a good baker, like most Yorkshire women, seeing that all the bread required is made at home. He does not believe in paying for cabs, and, instead of keeping a gamekeeper, is rather opposed to the whole fraternity of keepers. Having thus given the ideal and the real, we may say that amongst the South Yorkshire miners many of them are

local preachers and Sunday-school teachers, and not a few are also freeholders. Many of them are fond of a glass of beer, but not more so than others engaged in different work. Some of the younger members keep "snap" dogs for rabbit coursing in enclosed grounds. It has transpired that the gentleman who wrote the notice we have alluded to, painting the collier in such rich colours, was crammed by a waggish waiter at the King's Head Hotel, in Barnsley, and swallowed the hook baited with absurdities along with his "chop."

Another correspondent of a London daily paper, writing from the neighbourhood of Wigan, a few days since, also falls into some singular errors, and speaks most disparagingly of the unfortunate collier. Of him he says, "By the time he reaches middle life he is a rather sedate sort of savage," and his children are styled "noisy barbarians." The same writer, to show his knowledge of mining matters, alludes to the "butty" system in South Yorkshire, although it does not exist there in any shape. Another item of information given is that the collier "indulges largely in poultry, and game is not unfrequently seen upon his table." Now, we dare say he would like to see his table so furnished, but it is simply ridiculous to say that it is so. We may say that there has been a marked improvement during the last eight or ten years in the social and moral condition of the colliers, in some districts more than others, whilst the progress now making is more rapid than ever it has been. Looking at the dangers which surround all engaged in raising coal, which is admitted to be the great source of England's greatness, and contributing as it does to the social requirements of all classes of the community, we think we are fully justified in repelling the unfounded charges brought by sensational writers against a body, whatever may be their short comings, that have shown in the hour of danger the qualities befitting heroes. When a sudden and terrible calamity has taken place they have never hesitated to volunteer into the jaws of death, in the hope of saving some fellow-worker, and fought against the overpowering fire-damp until they have succumbed to its fatal effects. Surely, men that are capable of such acts are deserving of more consideration at the hands of those who are indebted to them for so much comfort, and even luxury, than to be characterised as "savages," and held up to ridicule for tastes and habits that do not belong to them. They are not all that could be desired, but they are, at least, entitled to have the truth spoken of them.

ENGLISH COAL IN FRANCE.—The total shipments of English coal to France to July 31 this year amounted to 1,047,404 tons, as compared with 1,376,938 tons in the corresponding period of 1870. There was an increase in the shipments to Cherbourg which amounted to July 31 this year to 32,708 tons, against 26,062 tons in the corresponding period of 1870. Rouen also imported 89,582 tons to July 31 this year, against 68,912 tons in the corresponding period of 1870. The exports to all the other leading centres of consumption present, however, a considerable decrease this year, Bordeaux figuring for 119,086 tons to July 31, against 150,404 tons in the corresponding period of 1870; Boulogne, for 46,625 tons, against 49,470 tons; Caen, for 50,235 tons, against 66,384 tons; Calais, for 17,704 tons, against 60,410 tons; Charente, for 23,757 tons, against 25,930 tons; Dieppe, for 94,439 tons, against 132,034 tons; Dunkerque, for 11,074 tons, against 59,887 tons; Havre, for 119,329 tons, against 156,827 tons; Honfleur, for 25,250 tons, against 32,934 tons; La Rochelle, for 24,414 tons, against 37,065 tons; Marseilles, for 16,899 tons, against 44,166 tons; Nantes, for 34,009 tons, against 49,384 tons; St. Nazaire, for 108,641 tons, against 131,407 tons, &c.

FOREIGN TIN.—From an advertisement in another column it will be seen that Messrs. Henry Bath and Son are inviting tenders for about 300 tons of Straits and Malacca tin, in lots of 10 tons each. Considerable interest will be felt in the result from the largeness of quantity, and the circumstance that the Banca sale at Rotterdam is to take place only a week later.

THE MINERAL RESOURCES OF NEW SOUTH WALES.—The value of the coal deposits of New South Wales has long been known, and the improving quality of the coal as the workings become more extensive has brought it so much into favour with those connected with the shipping interests visiting the colony that at present it is preferred in the Australian ports to coal which has been imported from England. But the success which has attended the development of the Newcastle fields should not make the colonists neglect the less favourably situated deposits. It is of paramount importance for the future of New South Wales that the coal fields of the West should be at once developed, in order to prevent the exhaustion of other resources, and to facilitate the opening up of other industries; it is, therefore, much to be regretted that so little consideration in the way of providing cheap transit is given to those disposed to speculate in the development of the Western mines. It should be remembered that whatever tends to establish new centres of industry in the interior must increase the prosperity of the existing cities, the traffic on the railways, and the general wealth of the colony, and that an abundance of cheap coal is the greatest possible incentive to industrial enterprise; but the earlier works connected with coal mining are so expensive and unremunerative that every possible encouragement should be given, both by private individuals and by the Legislature, to those who are bold enough to become the pioneers in so useful a kind of labour.

NEW SOUTH WALES—THE WESTERN GOLD FIELDS.—Prospecting parties who have chosen the Western gold fields as the place for operations have been highly successful. One of our correspondents, a practical miner of considerable experience, writes—"I have been away gold prospecting for a month, and I and others have taken up some land adjoining claims yielding 4 ozs. of gold to the ton. We have to go about 70 yards to cut the same reef in our land, and I am just leaving for the place to commence sinking. I will without fail send you next month some interesting information on the Western gold fields and other mining matters. There appears to be more gold mining speculations setting in in Sydney just now, owing to rich finds of gold at Gulgong, Hill-end, Tambaroora, Carcoar, &c. The last extensions on the Great Western Railway having assisted very much to develop our Western gold fields, Victorian and New Zealand miners can now come 110 miles from Sydney by rail, and great numbers have lately come to the new rush at the Gulgong alluvial diggings near Mudgee."

IRISH MINES.—A correspondent writes—"Mines in the South-West of Ireland have hitherto not enjoyed that extent of British support which their intrinsic merits so well deserve, and their abundant and rich resources will so amply repay when they are worked with judgment and adequate capital. In general they have been only partially operated on, and not fully developed, with the exception of the Berehaven Copper Mines, near Bantry Bay, the Cappagh, and the Ballyvaughan Copper Mines, also in the county of Cork. Many other really productive mines in that county were closed during the period of the famine and pestilence of 1847, and, with the exception of the above mines and two or three others, none have been re-opened but those for speculative operations in 1852 to 1857. This county abounds in minerals of every sort—mines of iron ores, manganese, lead, slates, besides copper ores of the richest quality, that only require capital to make them productive of lasting benefits to the parties and companies working them."

MINING GLOSSARY.—The third edition of the Glossary of Mining and Smelting Terms has now been printed, and contains carefully compiled lists of the technical terms used in the mines of Cornwall, Derbyshire, South Staffordshire, Newcastle, and Spain; and of the smelting terms used in France and Germany. The book, which will be found extremely valuable to those interested in mines desiring thoroughly to comprehend the agents' reports, will be forwarded from the Mining Journal office, 26, Fleet-street, E.C., on receipt of 2*s.*, or may be obtained, by order, through any bookseller or newsagent.

DOMINION OF CANADA OILS REFINERY.—The works of the Dominion Oil Refining Company are being pushed rapidly; their dock is finished, we presume, by this time, as the work was nearly completed on Saturday when we were down. It is a very solid structure, 255 ft. long, and 39 ft. wide, all the piles, which are very close, being driven 15 ft. into the solid clay. None of the machinery has been brought down from Port Edward yet, but the most of it has, we learn, arrived there. The Customs officials want it all to arrive before

they commence checking the parcels. The specimen brick-kiln, burnt a few days ago, turned out excellent building brick. They are now preparing to burn another kiln of 20,000, which will be ready to be placed in the wall about the beginning of next month, when the same foundation will be ready for them. The brick is made on the spot, all the clay and sand necessary being found in abundance on the company's property. We may state that the brick made is considerably heavier than the white brick made up the lake, weighing 1½ lb. more each, and very hard besides.—*The Sarnia Canadian*, Aug. 23.

REPORT FROM SHROPSHIRE.

The Lawton Ironworks, which we stated had been taken a short time ago, have been put into repair, and are now in operation. The new works of Nettlefold and Chamberlain, at Hadley, the puddling-furnaces of which are to be heated on Siemens' regenerating gas principle, are also in a state of readiness; two of the furnaces, at least, are expected to be in operation in a few days.

At Broseley a large body of water, which is known to lie in the old hollows, particularly in the neighbourhood of one of the great faults of the field, has been accidentally tapped, and has flooded some of the pits to such an extent as to suspend operations. There is no pumping-engine on the Broseley side of the Severn, yet Broseley suffers more inconvenience, probably, than any other town in the kingdom from a scarcity of water.

Last week we had to record the visit from the Iron and Steel Institute—the heads of the more advanced concerns of the kingdom came to see what may not inaptly be called the cradle of the trade, and we believe they were gratified with the result of their visit. Since then the members of the South Midland Institute of Mining, Civil, and Mechanical Engineers have visited the principal collieries of the Lilleshall Company. The party was met by Mr. E. Jones, one of the vice-presidents of the society, and conducted over the Prior's Lee furnaces and collieries. After inspecting the Hollinswood furnaces they proceeded to the Stafford pits, the last and most extreme sinking to the east of the field. Some time was spent here, and Mr. Jones then conducted his visitors across the fields, where the surface, which is as yet unbroken, is covered with the stubble of the recent harvest, but beneath which for two miles a richer harvest of mineral wealth is being gathered, unbroken by any considerable faults, and with a thousand yards of face open in each of the workings; they are all on the long wall system, and are ventilated at the rate of 50,000 ft. per minute. The Stafford, the Grange, and the Granville pits are raising from 5000 to 6000 tons of coal for each pair per month, and one pair, the Woodhouse, which were abandoned some years ago from having been "worked out" as was supposed, but which, under the able management of Mr. Jones, have had their shafts widened to 10 or 11 ft., to admit of two bands with slides, are yielding 5000 tons a month, and are likely to do so for 30 years to come. It is greatly to the credit of the company that few accidents occur in the field; we never, or rarely ever, hear of explosions; the machinery, too, and general appliances for working are the best that can be procured. Iron rods are used for slides, being preferred to wood, as their weight keeps them tight and straight. On arriving at the Lodge furnaces Mr. Wem, the manager, gave some interesting information as to the saving effected in calcining the ore, and in consequence of raising the tops of the furnaces from 50 to 70 ft. The ore calcined by these enclosed kilns is more regular and drier, he tells us, whilst a saving of slack to the extent of 6000 tons is effected; but the saving, taken in connection with the smelting process altogether, amounts to 19,000 tons, or in money value to the astounding sum of 6342*l.* per annum. A large portion of the coke is prepared in ovens, of which there are 88, and Mr. Wem says he even prefers slack to coal for coking, as, with the wetting process, it produces harder coke, and one capable of carrying a greater blast. The ores used are the pennystone, chancypennystone, yellowstone, ballstone, and blackstone, with 10 per cent. of hematite; this is for cold-blast iron. The furnaces are 70 ft. in height; one is 14 ft. in diameter, two are 15 ft., and two 17 ft., and the make respectively is 156, 173, and 174 tons each with the 14 turns. From the furnaces the party visited the offices and engine-shops, and having done so were entertained by Mr. Jones at lunch at his house, Granville Lodge.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Sept. 14.—There is but little alteration to note with regard to the Iron Trade since last week. Not only in the Erewash Valley line of railway, but also at Sheepbridge, Staveley, and other places in the same locality, the works are turning out large quantities of pig-iron, and for which there are good markets. In manufactured iron business is still tolerably active, more especially in pipes, girders, and general castings. The Coal Trade has been well maintained, the tonnage going to London being good for the time of year. The Midland Company have done much to advance the interests of coalowners on their line, by making sidings and branch lines to collieries, and the result has been to the advantage of all parties concerned, as shown by the quantity of coal sent from Derbyshire to London and the South. From Clay Cross alone there was sent last month no less than 27,232 tons, 13,084 tons from Langley Mill and 7482 tons from Eckington. The collieries in the Unstone Valley are doing a very fair business, and the minerals are in course of increased development.

The leading trades in Sheffield continue in a healthy state, and at many of them orders are in hand that will keep the men going over Christmas. The great armour-plate firms of Brown's and Cammell and Co.'s are kept steadily going on Government account as well as for the Continent. At both places a large quantity of Bessemer steel is produced, and made into rails, sheets, tires, and axles. For rails and every descriptions of railway material the demand is large, and may be said to be increasing, as steel and steel-headed rails appear likely to supersede those made of iron only, as from their great tenacity and lasting powers they will, probably, be found more economical. The business doing with America is of an average character, and a good "fall" trade is anticipated in cutlery and other goods. Best qualities of table cutlery are in fair request, and nearly all the file makers are now working full time. In the Rotherham district business is without alteration, the works and mills being kept well going. Weldless tires, plates, stoves, grates, brass fittings, and taps being amongst the articles in most request. The collieries in the district have so far been tolerably active of late in steam coal, but there has as yet been very little improvement in household qualities. Throughout nearly the whole of South Yorkshire the business doing in steam coal has been very good for several months, and at present a large tonnage is being forwarded to Grimsby for shipment to the Baltic ports, whilst a considerable business is being done with Hull not only for shipping, but for the use of steamers at that port. House coal, however, is rather quiet, but another month no doubt will make a material alteration for the better. The Great Northern Railway is now conveying a much larger tonnage to London from the district than at any previous period, and there is every probability that it will continue to do so as long as the existing rate lasts.

In West Yorkshire the ironworks are very busy in railway material, heavy forgings, plates, and pneumatic machinery. The well-known Steam Plough Works of Fowler and Co. (Limited) continue active. At the Bowling and other works in the neighbourhood of Bradford all classes of workmen are busy, the mills being fully worked. A considerable business is being done in crucible steel castings, and also in patent plates used in the manufacture of some of the textile fabrics for which Bradford is noted. The Thin coal collieries are being steadily worked, but at some others the men are not quite fully employed.

The miners and workpeople at the various collieries belonging to Messrs. Charlesworth, at Rothwell Haigh, Carlton, Robin Hood, and Lofthouse, had a grand demonstration on Monday in celebration of the eighteenth anniversary of the establishment of the Rothwell Haigh Colliery Accident Society. All the collieries were stopped for the day, and a general holiday was observed. A procession having been formed at Rothwell Haigh, they marched to Robin Hood Colliery, where they were joined by the workpeople residing in that locality. Thence they proceeded to the adjacent collieries, until by the time they had arrived at Lofthouse Hall, the residence of Mr. J. Charlesworth, the procession had assumed very large proportions. At the Hall they were received by their employers. Addresses were presented by the workpeople of Robin Hood and Newmarket Collieries, and of Rothwell Haigh, the former being read by Mr. Charles Nunn, and the one from the latter by Mr. J. Westmoreland. Mr. J. C. D. Charlesworth having replied, all the persons assembled were regaled with beer, ginger beer, and bread and cheese. Four brass bands had been engaged for the occasion. The weather was delightfully fine, and everyone appeared heartily to enjoy the proceedings. Accompanied by two bands, the workpeople from Rothwell wended

their way back, and were similarly entertained in their own village. The matrons and maidens took tea together in the Mechanics' Institute, and subsequently a large number enjoyed themselves in a variety of games, dancing, &c. Mr. WILLIAM WILLIS BAILEY, late manager of the Kilburne Colliery, near Belper, has been presented with his portrait, value 50l., by Mr. J. H. Wooley, on behalf of the men employed at the colliery. Mr. Wooley said from the commencement of the Kilburne working up to the present time the relationship existing between the workmen and himself had been one of unbroken friendship. The collier at Kilburne had always felt that attention was paid to his life, so as to make the danger of his occupation as little as possible. By his own christian life and character he had exerted a visible and powerful influence in the village of Kilburne. The workmen took that opportunity of giving expression to their deep regret that a connection extending over so many years had at last been severed. Mr. Bailey, who had been manager of the colliery for 38 years, suitably replied.

THE COLLIERIES EXPLOSION NEAR WIGAN.—At Wigan, on Thursday, Mr. C. E. Driffield, coroner for the district, opened an enquiry into the cause of the calamity. Mr. W. Crompton (Crompton and Shawcross), colliery proprietors, is foreman of the jury. The sitting was attended by Mr. T. Knowles, one of the partners in the firm owning the colliery; Mr. W. Pickard, miners' agent, and others. In the course of a conversation which took place before the jury were sworn, Mr. Knowles informed the coroner that the witnesses available would include a person who was placed over all the underlookers in the employ of the firm, and who had been through the mine on the morning of the explosion. The underlooker, who left the nine-feet a few minutes before it fired, could also be examined; and there was a man named Wright, who was the only collier not at work that morning, and who had lost two sons by the explosion. There was only one turn of men employed, and on the Monday the men had been holding a great meeting in Wigan. On Tuesday only five went to work, and no doubt this would account for so many being down on the Wednesday—the day of the explosion. They were anxious to make up for lost time. Mr. Pickard, replying to the coroner, said this was the fifth large explosion which had happened in the same mine in the South-West Lancashire district. There had been, in addition to the one at the Moss Pits, two at Haydock, one at Bryn Hall, and one at Low Hall.

Mr. Knowles, one of the owners of the colliery, said the firm did not intend to be represented by any solicitor at the enquiry. They were only anxious that the plain, simple truths might be got at, and that the great mystery which at present shrouded the affair should be cleared away, so that they might be able to avoid anything of the kind in future. Witnesses having been called to identify the bodies of the two persons who had died after being brought out of the mine, Mr. Knowles, replying to questions from the jury, said his own impression was that the fire was out, but he should like to be fortified by the opinion of some eminent mining engineers. It was certainly impossible to save any lives now, and it would be a very serious matter if the pit were opened too soon. Some time next week he thought it very probable the pit would be opened, and from a report he had from the principal underlooker, in whom he had implicit confidence, and who was down after the explosion, he did not think there would be much difficulty in getting at the bodies if the fire was out, as he had no doubt it would be from the state of the temperature. The shafts were not damaged very greatly, but what injury had been done showed that the explosion had been most terrific. Mr. Pickard said that when he went down after the explosion he took care to look up from the bottom to see in what state the shaft was. He thought it would soon be put right. The archway at the bottom, too, was not much damaged. After some further conversation the enquiry was adjourned.

REPORT FROM SCOTLAND.

Sept. 12.—The warrant market was somewhat irregular last week, and rose from 60s. 4½d. on Wednesday to 61s. 4½d. on Friday. On Monday we opened with a dull feeling, and business was freely done at about 60s. 6d. cash. To-day we have had again an irregular market. In the forenoon a few lots were done at about 60s. 4½d. cash. Late 'Change opened flat, at 60s. 2d. cash, and 60s. 6d. one month accepted, but before the close the price rallied to 60s. 4½d. cash, with buyers over, sellers asking 60s. 6d. ten days. No. 1, g.m.b., 61s. 6d.; No. 3, 60s. 6d. The shipments have for the past three weeks been on a more moderate scale, but they still compare favourably with the returns at the same period last year, when the export trade was so much curtailed by the effects of the war panic and the blockade of the German ports. Makers' iron remains pretty firm, but any alteration in prices is in the favour of buyers:—

	No. 1.	No. 3.
G. M. brands at Glasgow (deliverable alongside).....	61s. 6d.	60s. 0d.
Gairthorpe ditto ditto ditto	72 6	62 0
Coltness ditto ditto ditto	72 6	62 6
Summerlee ditto ditto ditto	69 0	62 0
Cambridge ditto ditto ditto	62 0	62 0
At Port Dundas	65 0	62 6
Langloan ditto ditto ditto	65 0	62 6
Calder ditto ditto ditto	67 0	60 0
Glengarnock at Ardrossan ditto	66 6	62 0
Dalmellington ditto ditto	62 0	61 0
Eglinton ditto ditto ditto	62 6	61 6
Carron at Grangemouth ditto	59 0	—
Shotts ditto (selected) ditto	64 0	—
Kinnell ditto ditto ditto	63 6	61 6
G. M. brands at Middlesbrough ditto	65 0	70 0
Bar iron	58 0 to 58 10 0	—
Nail rods	8 10 0	—

For the week ending Sept. 9, 1871	Tons 14,685
Sept. 10, 1870	10,077

Increase	4,608
Total increase since December 25, 1870	132,302

There has only been a limited business done in finished iron since the advance, with a cessation in the enquiry, but makers hold firmly to the new quotations, although they are yet mostly engaged on contracts deliverable at previous rates. In fact, there is every probability of another advance before long, as the Scotch puddlers are still dissatisfied with their wages, and have held several semi-private meetings for the purpose of arranging for agitating for a further advance of 5 per cent. when matters are ripe for it. In the meantime, the works are sufficiently busy with mixed orders for bar, ship and boiler-plates, nail-roads, galvanised sheets, hollow ware, pipes, railway chairs, &c.

The Scotch coalmasters have had a run of two or three months of brisk trade, and they cannot now complain of prices since the advance. The prices, f.o.b., at the Broomielaw, is—Main, 7s. to 7s. 6d.; splint, 8s.; best household, 10s.; burnt coal for steamers, 11s.; coke, 18s. to 20s. per ton, less discount as arranged. During the week the shipments have been very heavy, 42,917 tons having been sent foreign and coastwise, against 24,034 tons in the corresponding week of last year, a total less than the former shipments exported this year. The colliers' wages average 4s. 6d. per day, but a few masters who have fine household coal pay 5s. a day, and by that means get the pick of the men—hands who are more economic in their working, and more steady in their habits. With the exception of the pits at Clippens—Johnstone district—miners who have lifted their "grith" have all returned to their work, the advance having been conceded to them. The Fifeshire miners have been promised an advance—they asked 1s. a day, but the matter will likely be compromised by the masters granting 6d.

Messrs. Merry and Cunningham, who we noticed last week as having purchased the coal works of Dr. Robertson, at Blairdardie, Renfrewshire, have also purchased that gentleman's lease of the coal and ironstone in the lands of East and West Drumchapel, Cardenhill estate, which he lately acquired. Regarding the blackband ironstone referred to last week, we learn it was discovered some time ago by Dr. Robertson in sinking one of his pits at Blairdardie, but it has only lately been developed and opened out. The seam, in quality and thickness, considerably surpassed his expectations, and it has now been found to extend to the adjoining lands of Drumchapel, which have been sold by him, as above noted.

The proposed College for Technical Education in Glasgow has now been advanced somewhat, and the committee aim at raising a sum of not less than 50,000l. for carrying it into effect. The branches are to include mining and metallurgy—coal, iron, and other ores; the construction of furnaces, machinery, &c., in connection, with the working of metals, and generally whatever education is necessary to give a complete scientific knowledge in this department. It is proposed to hold the classes in the evening, and this we regard as a *sine qua non*, if these classes are intended to be of general utility.

IMPORTANT MODIFICATION OF THE STEAM-ENGINE—REPEATING POWER.—An operative mechanic from the West claims to have discovered an entirely new method of applying the power of steam to give a second or repeating impulse to an engine. The engine itself, which has been exhibited in Edinburgh in working gear, is constructed upon an entirely new form, and gives out its acquired power in a style hitherto only partially successful. Mr. Wright, the inventor, affirms that he has applied an entirely new principle to the construction of the rotary engine—a principle by which he is enabled not only to dispense with the connecting-rod, slider, crank, &c., of the old alternate motion, but to economise his steam-power as to make each induction capable of being used on one, two, or three successive surfaces. The inventor, we understand, has secured a patent for his engine, and is being assisted financially by a number of gentlemen in Edinburgh. Mr. Wright explains that by his mode of construction "six dif-

ferent powers can be obtained in one piece of machinery if constructed on the principle of double action. These engines are capable of using successfully the steam a second time, and this before the steam passes into the low-pressure pistons, and dispense with all the complications necessary in those at present in use. The engines themselves are very light, occupy little space, have greater power with less steam, and can in every way be constructed and kept up at one-half the ordinary expense, for the reason that all internal work can be renewed in a few hours even at sea." He states further that he is "prepared to superintend the construction of an engine which will excel any either for marine or traction purposes, and is also prepared to make them work with equilibrium air-pumps, which will dispense with all the drawback caused by the vacuum on the bucket, and give an additional power, still leaving as good a vacuum." Mr. Wright states that he has constructed two engines on his new system, and that these have worked quite satisfactorily. In answer to a communication which he has made on the subject to the Admiralty, their lordships have asked him to send models for their consideration, but the want of sufficient funds has in the meantime prevented Mr. Wright from fulfilling this request.

REPORT FROM THE NORTH OF ENGLAND.

Sept. 14.—Since our last report the trade of this district has not undergone any particular change. In the meantime the returns of the Cleveland Ironmasters' Association has been issued for August, and from this we observe that the make of pig-iron last month was 157,053 tons, being nearly 12,000 tons more than was made in August last year, and 1073 tons in excess of July this year. Shipments of pig-iron from Middlesbrough to foreign ports last month were 28,570 tons, against 6923 tons in August, 1870, the great difference being caused, of course, by the war. Coastwise deliveries were in August this year 20,582 tons, or 7444 tons more than the corresponding month of 1870. Notwithstanding the increase of 1073 tons in the make of pig-iron, and the occurrence of the holidays during the month, together with the broken time caused by the excessive heat, when the men were unable to work, there was a decrease in stocks at the end of last month, as compared with July 31, of 1823 tons—959 tons in makers' stocks, which now amount to only 90,127 tons; and 864 tons in warrant stores, which stock is but 6295 tons. There are given in the return 127 furnaces in Cleveland, 122 of which are in regular blast. This number will be increased by the commencement of the Lakenby Iron Company's two new furnaces, which are, we understand, to be blown in on Monday or Tuesday. They are situated near to Middlesbrough, and are fitted up with all the latest improvements. The demand for pig-iron is still active, though it is scarcely so great as it was a fortnight ago, prices remain firm, and have not experienced any change in consequence of the recent alteration in the Glasgow rates. Most makers are being pressed for the fulfilment of contracts, but in many instances buyers are obliged to wait longer than is agreeable to them. Deliveries are heavy throughout the district. Foundry consumption is slightly increased, and it is likely to continue somewhat heavy for many weeks to come, judging from orders reported to have been received in the neighbourhood lately.

In the Manufactured Iron departments business continues in a prosperous condition. There is a good demand for shipbuilding iron, of which a large quantity is regularly being made. The orders for iron ships are reported to be very numerous, and new contracts for steamers have been made within the past week or two by builders on the Tees, and also further north. For rail material there is a fair enquiry, and the prospect for the winter season is generally thought to be pretty promising. The larger houses in the district are in possession of plenty of work to keep them going for the present, but whilst some of them have orders on their books to carry them into winter others are not so favourably circumstanced, but from the present state of the market there seems every probability of fair employment for rail-mills for some months to come. In bar-iron there is much activity at this season of the year, principally for shipping orders. In the coal and coke trades there is a general activity.

TRADE OF THE TYNE AND WEAR.

SEPT. 14.—The imports into the Tyne and Wear have again been very large, consisting of esparto grass, timber, iron ore, &c. The coal trade still continues long, but, as the Welsh strike has terminated and the export trade is much slackened, soon the trade must become more quiet. The new deep winning at Wardley has progressed rapidly lately. At the first shaft the Bensham seam (a good house coal) is being worked, and at the second shaft a lower seam has been proved—that is, the Wear Low Main—at the depth of about 20 fathoms. This seam is an excellent steam coal. This shaft is now being pushed down further, and the famous Hutton seam, a first-class gas coal, is expected to be reached soon. All the feeders of water met with at the shaft have been tubbed back, and water only is pumped to supply the establishment. The stratum being sunk through is perfectly dry. The new winning at Heston has also progressed well lately, and most of the feeders of water have been successfully tubbed back, so that little interference will be met with in sinking the famous seams of house and other coal found in that locality. A large number of houses are to be erected here for the workmen at the new winning. The new winning at Silksworth also continues to progress satisfactorily, although a considerable distance has yet to be sunk before reaching the Maudlin seam there.

A new company has been commenced here called the Felling Iron, Coal, and Chemical Company. The object is to take over the iron-works of Messrs. Frazer, Roberts, and Co., the chemical works of the same firm, and also the flourishing colliery adjoining, at Felling. The capital to be raised is 200,000l., and there can be little doubt of the complete success of the company, if the character of the works be considered. The iron-works of Messrs. Frazer are of quite modern construction, and consist of puddling-furnaces, rolling-mills, &c., and an excellent steam engine has been established and carried on here some time; the works are most favourably situated for railway and sea transport, being on the bank of the River Tyne, about two miles below bridge, and about one mile from the North-Eastern Railway, with which the Felling Colliery branch line communicates. The Felling Colliery is situated within a few yards of the North-Eastern Railway, and is connected with the main line by a short branch, and a private line also extends from the colliery to the River Tyne, where the coals are shipped. During the past few years this colliery has been extensively improved. The old Hutton seam, which was the only one worked for many years, produces first-class gas coal, and a considerable tract of additional royalty has been secured, so that this seam will continue to be worked many years for this coal. A sinking has been made, 80 fms. below this seam, to the famous Busty seam, a first-class coking coal, and the seam is now worked, and also the fire-clay which is beneath it. A number of coke-ovens have been erected, and some excellent coke is at the present time being made from this seam, and also fire-bricks. Above the Busty seam there are two good seams of steam coals, and both these seams have been opened out, and are now regularly worked, so that we have here steam, gas, and coking coal in quantity almost inexhaustible. A new winding-engine of modern construction has been erected, and is nearly ready for working. Of course when this is started the quantity raised will be largely increased. The whole concern is brought forward under the auspices of Mr. George Elliott, M.P., and several other influential local gentlemen connected with the coal and iron trades.

The Iron and General Engine Trades continue extremely good, and it is clear that there is no lack of spirit in the trades, for in spite of the strike extensions are in progress at some of the works. At Black Hawthorn Works, Gateshead, considerable additions are being made to the fitting and erecting departments, and the works are fully employed, and a good deal of overtime is worked. But the number of men at work is gradually increasing at all the works without exception, being daily augmented by the arrival of men from abroad, and the old hands are also going in. Upwards of 1200 men are now at work at Elswick, and considerable numbers are also at work at the other concerns. Assault cases still are very frequent, and a number of strike hands have been sent to goal for various periods.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Sept. 14.—The demand for coal and slack is buoyant for the season in all the leading districts of Staffordshire, and quotations show a satisfactory degree of firmness. In the Cannock Chase field several new leases have just been granted by the Marquis of Anglesey, the lord of the manor, and additional workings will be at once opened out in that thriving and enterprising district. In the Black Country the demand is particularly active for Thick coal, and as winter approaches prices are getting firmer. In the opinion of many, a formal advance in quotations, as well as in the wages of colliers, will be declared shortly throughout the South Staffordshire coal field. Ironstones are in satisfactory demand, and prices are increasing in firmness, especially for native ores.

The Iron Trade continues active both in the pig and finished departments, although transactions have been considerably interrupted during the past fortnight by the agitation among the millmen for advanced wages. There has been no lack of orders for the improvement in demand—although that is considerable—but it is due in a great measure to the increasing value of hematites and other ores. It will thus be seen that the advantage gained by the makers is not so great as is generally believed. We hear of several additional furnaces as likely soon to be put in operation, among them being the new one which Mr. Rose is building at Moxley, near Bilston, which is very spacious, and fitted with all the newest scientific appliances for consuming waste gases, and otherwise economising production.

The Hardware Manufacturers in the Black Country continue to report a very fair supply of orders for all the leading classes of product, the demand being especially conspicuous for cast-iron castings, and various descriptions of tools, for the extensive purposes. Gas tubing finds a ready market on the Continent, some very extensive orders from Paris being reported to repair the work of destruction by the besiegers and the Communists in the early part of the year. A single order for 500 tons of this class of produce is in course of execution in the district on account for Paris, and many of its

extent have been placed during the last few weeks. The newly-erected tube factory of Messrs. Brown and Co., Wednesbury, commences operations next week. The Shropshire industries are all active. The great Lilleshall Iron Company are quite oppressed with orders, as well as in the machine shops and foundries as at the blast-furnaces. On Tuesday the first of a series of gas furnaces, on Siemens' principle, was started near to the Lilleshall Works, at which the firm of Messrs. Chamberlain and Co., the extensive wood screw manufacturers of Birmingham, will manufacture their own wire, chiefly from pig-iron of the Lilleshall Company. This will introduce a new manufacture into Shropshire. Everything about the new establishment has been executed upon the models most approved by the best metallurgical chemists and mechanical engineers. Economy of fuel and economy of labour distinguishes all that has been done; and Siemens' furnaces have been made increasingly effective, by certain alterations in detail suggested by the engineer to the Lilleshall Company, Mr. J. Lloyd, and approved by Mr. Siemens.

The valuable freehold mineral estate, situated at Cradley, near Stourbridge, Worcestershire, was offered for sale by Messrs. Oates, Ferriss, and Wood, bridge, at the Talbot Hotel, Stourbridge, on Friday. The estate comprised over 31 acres of arable land, with suitable homestead. It is believed to contain Brooch, Thick, and other measures of coal and ironstone of the South Staffordshire coal field; also a Stourbridge fire-clay seam. It is in a populous locality where there is a very large demand for coal for manufacturing and household purposes, which demand is at the present time increasing to a great extent in consequence of the exhaustion of the coal fields of the adjoining districts. The Stourbridge and Birmingham Railway runs within ¼ mile of the estate. The property was bought for 14,500l. by Mr. James Holcroft, a well-known South Staffordshire coal and iron master.

REPORT FROM MONMOUTH AND SOUTH WALES.

Sept. 14.—Judging from the energy with which operations are carried on at the works, the Iron Trade might be pronounced prosperous; but appearances are deceptive, as there have been only comparatively trivial transactions entered into for the last three or four weeks. This arises principally from the unwillingness of buyers to give higher prices, and the hesitation of manufacturers to accept new orders at the old rates; but this state of things, it is to be hoped, will be at an end as soon as the Quarterly Meetings of the trade are held. The clearances to the United States, Canada, and some of the continental markets still continue on a large scale, but there is, perhaps, a slight falling off as compared with a week ago, the iron being shipped direct from the works. Proportionate quantities of rails, bars, and plates are included in the orders being worked off. About the same business is being done on home account as for the last two or three weeks. Pig-iron is largely produced and consumed in the district. The position of the Tin-Plate Trade continues satisfactory. The demand is extensive, and prices are improving.

It cannot be said that employment at the steam coal collieries is going on with the desired regularity, and it is evident that it will be some weeks before the men will settle down properly to their work. Several rather serious disturbances have occurred between the new hands from Staffordshire and elsewhere who remained in the district and the old colliers, and the result has been that very little work has been accomplished for some days past. A vague notion seems to prevail among the men that the masters are to be sincere in their determination to submit all matters in dispute to arbitration. What ground there is for this singular notion it is difficult to see, for the masters have not in any way departed from the arrangement made by the men a fortnight ago. An arbitration, the importance and issue of which will affect the property of many thousands of people, cannot be undertaken in a day, and the men should remember that reasonable time must be allowed for the arbitrators to make their arrangements, and for the necessary preparations to be made to obtain evidence. As the receipts of the local railways will show, however, there has been a considerable increase in the quantity of coal sent to the ports for shipment, but there is still room for a large increase in the output. Until the arbitration is over it is tolerably clear that the men will not work with the usual steadiness. In the house coal trade there is about the usual business doing.

Dissatisfaction is now beginning to be freely expressed among the men employed by the ironmasters at the rate of wages they are receiving. A meeting of delegates, representing about 35,000 iron and coal workers, has been held in Monmouthshire this week, and it was resolved to make a determined and combined appeal to the masters for an advance of 10 per cent. upon the present rate of wages. The men contend that it is full time that the rate of wages which prevailed previous to the great panic of seven years ago should be re-established. A general reduction of 10 per cent. was then made by the masters, and it has for this singular reason long been determined, and wide-spread the movement is that they will listen to the appeal, and grant the advance asked for. It is difficult, however, to see how an advance of 10 per cent. can be granted in wages, unless there is a proportionate rise made in the price of iron. The agitation will by no means tend to improve the position of the ironmasters in regard to business.

With the exception of the coal shipments from Cardiff, the trade of the local ports for last month bears favourable comparison with that of the corresponding month of last year.

Proceedings were this week taken against the proprietors of the Aberthaw Tinworks for employing boys under age, contrary to the provisions of the Factories Act. Mr. E. B. Fitten, sub-inspector, prosecuted, and there were altogether 21 cases to be heard: eighteen of the cases were, however, withdrawn in dispute by the masters, and it has for this singular reason been pleaded. The magistrates inflicted a fine of 20s. and costs in each of the three cases, and ordered payment of costs in the others. A similar charge was instituted against the Tredegar Iron Company, it being proved that a lad under 13 years of age was employed as hooker-up in the puddling. A fine of 20s. was imposed on the company, and the father of the lad was fined 10s. and costs for not sending him to school.

The arrivals at Swansea include—the Bernigo, from Bilbao, with 235 tons of iron ore, to order; Albany, from Bilbao, with 305 tons of iron ore and 40 tons of blende, for H. Bath and Son; Sheldrake, from Bilbao, with 200 tons of iron ore, for T. Wood and Co.; T. G. V., from St. Malo, with 108 tons of blue ore, to order; Notre Dame de Bour Secours, from Bayonne, with 80 tons of copper ore and 123 tons of ditto, to order; Elgin, from Stockholm, with 40 tons of iron, to order; Island Belle, from Bilbao, with 392 tons of iron ore, for H. Bath and Son.

CHEMICALS AND MINERALS.—(Messrs. J. Berger Spence and Co., Liverpool, Sept. 14.)—Soda: Cream carbonate firm, at 13l. 8s. to 13l. 12s. 6d.; white, 60 per cent., 14l. to 14l. 8s.; soda ash steady, at 2½d. to 2½d.; soda crystals, at 2½d. to 2½d.; soda ash, 60 per cent., 13l. 10s. to 13l. 12s. 6d.; salt-cake, 50 per cent., 13l. 10s. to 13l. 12s. 6d.; Nitrate of soda: 15l. 10s. and 15l. 15s. are now the current rates. Potash: Muricates, 80 per cent., quiet, at 9l. f.o.b.; Prussiate, red, at 2s. 6d. to 2s. 7d.; yellow, 18s. 5½d. to 18s. 6d.; chlorate, 18s. 6d. to 18s. 7d.; chrome, 10d.; potashes, 35s. 9d. to 36s.; pearl ash, 47s. 6d. to 48s.—Saltpetre: Foreign steady, at 28l. to 30l.; refined, 33l. to 34l.—Alum: At 6l. 5s. to 6l. 10s. for loose lump; in export barrels, 7l.; ground, 7l. 10s.—Bleaching Powder: changed, at 13l.—Ammonia: White and grey, 19l. 10s. to 20l. 10s.; brown, 19l. 10s. to 20l. 10s.; carbonate, 6½d. per lb.—Iron Salts: Green and rusty compounds, at 12s. 6d. to 12s. 7d.; Sulphate of copper, at 24l. 10s. to 25l.—Arsenic, at 6l. 10s. to 6l. 15s. for fine powdered.—Acid: Tartaric firm, at 1s. 3½d. to 1s. 4d.; oxalic, 1½d. to 1s.; sulphuric, at 3l. 10s. to 3l. 15s.; carbolic, at 1s. 1d. to 1s. 2d.—Magnesia: Epsom salts, 4l. 10s. to 4l. 17s. 6d. for refined; Oils: Olive, 49l. to 50l.; spindle, loom, and dense oils, 4s. to 5s. 6d.; white Norwegian cod liver oil, 4s. 6d. to 6s. per gallon.—Pitch: Flat, at 12s. to 10s.—Benzole: More offering, 30 per cent., 8s.; 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THE LANESTOSA LEAD AND ZINC MINING COMPANY (LIMITED).

Incorporated under the Companies Acts, 1862 and 1867, by which the liability of shareholders is limited to the amount of their shares.
Capital £24,000, in 12,000 shares of £2 each.
10s. per share to be paid on application; 10s. per share on allotment; the remainder to be called up as required, but not to exceed 5s. per share, and calls not to be made at less intervals than three months.

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OFFICES—5, QUEEN-STREET-PLACE, LONDON, E.C.

ABRIDGED PROSPECTUS.
This company is formed for the purpose of acquiring and working the lead and zinc mines of Lanestosa, in the province of Vizcaya, in the North of Spain. The property for which a provisional agreement to purchase has been made, consists of—1st, 10 concessions containing an area of 187 acres, constituting the existing Lanestosa Mines, with the plant, tools, and all ores and materials thereon; and 2nd, additional concessions of 200 acres, the right to which has been recently acquired by the vendors.

The mines are situated near the village of Lanestosa, and about 40 miles west of Bilbao, and 10 miles from Limpias, the port of shipment. The climate is good, and an abundant supply of labour can be obtained at a very cheap rate, a large number of miners residing on the spot. The ores can be forwarded from the mines to Limpias, and thence to Swansea, at a cost, including carriage, storage, and freight, of 18s. per ton.

Extensive deposits of calamine, or zinc ore, exist in six of the concessions, from which more than 200,000 tons have been extracted, yielding a considerable profit. These will be explored, as they have not hitherto been, by systematic works, and will, it is expected, yield good returns; but the purpose for which more particularly this company is formed is to explore and work the lead lodes which exist in the other concessions.

Mr. Ritchie, the engineer who has made a special survey of these mines on behalf of Messrs. John Taylor and Sons, lays great stress on the evidence afforded by the immense remains of ancient workings, as well as on the indications presented by the lodes at the surface.

Mr. Ritchie states that in nearly every part of Spain where modern operations have been carried on below the deepest workings of the ancients they have led to profitable results. The Llaneros, Fortuna, and Alamillos Mines furnish satisfactory proof of this, as it was on the faith of such evidence of ancient workings that all of those mines were re-opened by the present companies. The possession of the property by the present company dates from Sept. 1, 1871, all expenses up to that time being discharged by the vendors.

Copies of the reports of Mr. Ritchie and of Captain Gifford, who has been in charge of the mines for the past 18 months, may be seen at the offices of the company.
The only contract entered into is a contract dated August 19, 1871, between James Coxon Richardson of the first part, Alfred Reed and Gregory Rhodes of the second part, and John Taylor, on behalf of the company, of the third part; the company has thereby acquired all the respective interests of the vendors in the above-mentioned concessions for £3000, of which £3500 is to be paid in cash upon the title being properly vested in the company, the vendors agreeing to accept for the remaining £4500 3000 shares, with 30s. per share considered as paid up. When calls have been made to that extent on the remaining 9000 shares, these 3000 shares will be liable in common with them for the balance of 10s. per share.

Applications for shares must be made, accompanied by the deposit of 10s. per share, on the form annexed to the prospectus, and can be sent either to the bankers, brokers, or to the secretary at the offices of the company.
Prospectuses and forms of application for shares can be had of the secretary at the offices of the company, 5, Queen-street-place, E.C.; of Messrs. HILL, FAWCETT, and HILL, the company's brokers, 29, Threadneedle-street, London, E.C.; or of Messrs. JOHN TAYLOR and SONS, 5, Queen-street-place, London, E.C.
By order of the board, HENRY SWAFFIELD, Secretary.
London, 14th September, 1871.

LYNCLYS LEAD AND COPPER MINING COMPANY (LIMITED).

To be incorporated under the Companies Acts, 1862 and 1867.
Capital £12,000, in 12,000 shares of £1 each.
5s. on application, and 5s. on allotment.
Calls not to exceed 2s. 6d. per share, and not to be made at intervals of less than three months.

DIRECTORS.
To be chosen at the first general meeting of subscribers for shares.
BANKERS—Messrs. ROCKE, EYTON, and Co., Shrewsbury.
SOLICITOR—Mr. HENRY MORRIS.
SECRETARY—Mr. H. J. BADDELEY, Pontesbury.
OFFICES—SWAN HILL, SHREWSBURY.

PROSPECTUS.
The company is being formed with the object of working the lead, copper, and other minerals under land situated at Lynclis, near Oswestry, Salop. The area of the land under which the right to work has been reserved is about 300 acres.

The property is most conveniently situated in proximity to the Lynclis Station on the Cambrian Railway System, and a peculiar feature in it is that adit levels can be driven, and the mines worked to a very considerable extent, without the aid of steam power, thereby enabling the company to further test and develop the property at a very moderate expense.

The value of the property for mining purposes has been ascertained by operations carried on for some months, which have proved the existence of five large well characterised mineral lodes of lead, copper, &c., and a bed of oxide of iron. The promoters have had the property examined and reported upon by competent judges, and they append some of the reports.

It may be added that, in addition to the presence of lead, copper, &c., the geological formation of the property is limestone, offering an opportunity for obtaining stone for fluxing purposes, and for converting into lime.

In the allotment of shares preference will be given to those applicants who desire to pay up in full on allotment.
If no allotment be made, the deposit will be returned in full at an early date, without deduction.

Application for shares may be made in the form accompanying the prospectus, addressed to the Solicitor or Secretary.
Shrewsbury, August 21, 1871.

REPORTS.
Aug. 5.—At your request I have carefully inspected the above mine, and beg to hand you my report thereon. The property is situated near Oswestry, in the county of Salop, and comprises a good tract of ground; its geological formation is limestone, through which five known large and well-defined lodes traverse, and hitherto operations have been confined principally to two lodes—namely, the south or Ranters lode, and the north and south lode. On Ranters lode, which is bearing here to east and west, several pits have been sunk to a depth of 3 to 16 yards, and small drifts made for over 100 yards in length, and for the whole distance I find the lode to contain good stones of lead ore, where good pits are now lying at surface, which have been broken in the several pits and drifts. A more promising and encouraging lode cannot be seen so shallow, and I firmly believe, depth is the only thing required to prove this remunerative.

It will form a junction with the other lodes passing through the sett. There is also a north and south lode, discovered by sinking a shaft which is 25 yards deep, where large stones of copper and carbonates have been broken. In addition to these lodes there is a bed of oxide of iron running through the sett, which is 4 feet thick, and from 15 to 20 yards wide, which can be sent from the mine at a good profit, being close at surface and in proximity to the railway station, and the total expenditure to send it into the market would be very trifling. I beg to remark that two adit levels can be taken up at the foot of the hill, one on the south or Ranters lode, and the other on the north or south lode, and I think that both would come in 80 yards deep on top of the hill where they will form a junction, which I look at as a very favourable feature, and the limestone can be saved for burning and other purposes.

In conclusion, allow me to say, I consider you have a property of no small value, and where a vast amount of work can be done without the aid of steam-power, and looking at the several favourable features which the property presents, the prospects are such as to warrant a vigorous prosecution, when I think a small outlay likely to bring it into a profitable position.

JAMES NANCARROW.
August 6, 1871.—This sett is situated near Oswestry, in the county of Salop, and comprises a large extent of ground. There are several well-defined mineral lodes opened out, and lead and copper ores broken in all. I may note two east and west lodes run nearly parallel in the one on which pits are sunk; the lode is 4 ft. wide, producing ½ ton of lead ore per fathom, at only 5 fms. in depth, underlie; I believe in going to a depth of 20 fms. or so you will meet with the junction and a body of lead ore. An adit level can be driven on the course of the lode, which will prove beneficial for the mine and erection of dressing-floors, &c. On the north side of the sett there is a shaft sunk on a north and south lode, which is producing copper mixed with gossan; I should also recommend doing you will meet with a junction which no doubt will produce a large body of this sett a large body of oxide of iron, which can be raised cheaply, the sett being within a distance of one mile of the railway station, and materials can be procured at a reasonable rate. In conclusion, I feel confident in going to a depth of 80 to 100 yards in this mineral ground you will find a large body of lead and copper ores.
JOHN LESTER.

TITANIC STEEL AND IRON COMPANY (LIMITED).

STEEL AND IRONWORKS FOR SALE, BY PRIVATE TREATY.
THE LIQUIDATOR OF THE ABOVE-NAMED COMPANY is prepared to TREAT for the SALE, by private arrangement, as a going concern, of the WHOLE of the company's VALUABLE FREEHOLD MANUFACTURING PREMISES, known as

THE FOREST STEEL WORKS.
Situate at COLEFORD, in the FOREST OF DEAN, GLOUCESTERSHIRE, extending over an area of about SEVEN ACRES, together with all the WORKSHOPS, FORGE, STOREHOUSES, OFFICES, PLANT and MACHINERY; also some valuable PATENTS, LICENSES, and LEASES, including LEASE of DARKHILL and SHUTCASTLE COLLIERIES.
Full particulars and orders to inspect the works can be obtained on application to ROBERT FLETCHER, 2, Moorgate-street, London, E.C., the Liquidator; or to ALFRED DAVY, Engineer, Sheffield.
The usual business of the company is meanwhile carried on at the works.

IN RE THE CARDIGAN BAY CONSOLS MINING COMPANY (LIMITED).
IN LIQUIDATION.

VALUABLE LEAD MINING PROPERTY.
held for an UNEXPIRED Term of nearly Nineteen Years, together with the costly PLANT and MACHINERY now in use on the workings, and in excellent condition, situate in the parishes of GWAR-CWM-BACH, GWAR-CWM-SSA, GWAR-CWM-UCHA, and PENSARN, in the county of CARDIGAN, WALES, and about nine miles from Aberystwith, which will be SOLD, BY AUCTION, at the Mart, Tokenhouse-yard, London, E.C., on Tuesday, the 3rd day of October, 1871, at Twelve for One o'clock, by Mr. ROBERT L. CURTIS (the Liquidator).
Particulars, with conditions of sale, may be had of E. G. ELWES, Esq., Solicitor, 8, Finsbury's Inn, Holborn; of Capt. RICHARD WILLIAMS, Goglian, Aberystwith; and of the Liquidator, 8, Union-court, Old Broad-street, London, E.C.

ARMAGH LEAD MINING COMPANY (LIMITED).
IN LIQUIDATION.

TO BE SOLD, BY PUBLIC AUCTION, by Mr. F. F. CAMPBELL (Auctioneer, Dundalk), on Thursday, the 21st September, 1871, at Twelve o'clock at noon, on the CREGGAN MINES, near CROSMAGLEN, DUNDALK, IRELAND, all the MACHINERY and PLANT, consisting of—
ONE 26 inch CYLINDER CORNISH PUMPING ENGINE, 8½ feet stroke, with TWO BOILERS, about 8 tons each.
ONE 16 inch HORIZONTAL ROTARY CONDENSING ENGINE, 5 feet stroke, with TWO BOILERS, about 5 tons each.
ONE 14 inch CYLINDER ROTARY CONDENSING ENGINE, with ONE BOILER, about 6 tons, stroke 5 feet, with winding and pumping gear attached.
ONE CORNISH CRUSHING MILL, rollers 22 inches diameter, with cast-iron shaft wheel and fittings, complete—all in excellent condition.
About 45 fathoms 9 inch MAIN RODS, with strapping plates, bolts, &c., and about 80 fathoms 9 and 10 inch PUMPS, all with working barrels, II-pieces, and door-pieces to match,—all nearly new.
About 120 fathoms 6 and 7 inch PUMPS, with working barrels and door-pieces complete; also ONE 8½ inch PLUNGER POLE, with pole case, stuffing box and gland.
150 fathoms 10 inch CAPSTAN ROPE, TIMBER, CHAINS, WIRE ROPE, and all the necessary MATERIALS to a going mine.
Capt. BAILEY, Crosmaglen, will show the materials on the ground, and any further particulars required will be given by—
T. CURRIE GREGORY, C.E., Liquidator.
62, St. Vincent-street, Glasgow, August 28, 1871.

PRELIMINARY ANNOUNCEMENT.
THE FISHBURN ESTATE, situate in the Parish of SEDGEFIELD, in the County of DURHAM, belonging to CHRISTOPHER WATKINS, Esq.
The MANSION OF FISHBURN HALL, several FARMS of FREEHOLD LAND, containing in the aggregate about 663 acres, with the valuable SEAMS of COAL thereunder, and also a COPHOLD ESTATE adjoining, containing about 36 acres.
WILL BE OFFERED FOR SALE, BY PUBLIC AUCTION, at the King's Head Inn, Darlington, in the month of October next.
ALLISON, SON, and WILLAN, Solicitors, Darlington.
September 14, 1871.

FOR SALE.
15 TONS LOW MOOR IRON, ¾ square.
15 " GALVANISED CORRUGATED SHEETS, No. 26 W. G.
50 " SPRING STEEL, damaged.
300 " CAST IRON, cold blast.
15 LOW MOOR GUNS, about 5 tons each.
10 TONS LOW MOOR SHOT and SHELL.
2 " OLD BRASS.
200 " No. 1 LLYDE and MONKLAND PIG IRON.
Apply to—
JAMES JONES,
48, TOWER BUILDINGS EAST, LIVERPOOL.
September 13, 1871.

FOR SALE, BY PRIVATE CONTRACT.
ONE 42 in. PUMPING ENGINE.
ONE 30 in. PUMPING ENGINE.
ONE 30 in. STAMPING ENGINE.
ONE 22 in. WINDING ENGINE.
Several good BOILERS, from 8 to 12 tons each.
Also, about 90 fms. of 7 in. FLAT RODS, complete.
A large quantity of PITWORK, from 7 in. to 16 in., and many other articles in general use in mining.
Apply to—
MICHELL and JENKIN, Engineers, Redruth.

FOR SALE, THE CAMBRIA LEAD MINE.
The above Mine is situate within two miles of the Glandovey Station, on the Cambrian Railways, and there is an excellent road thereto.
There are two good lodes running one into another east to west, and the indications are most promising. There is also ample water power for all purposes of machinery and working of the mine in the driest weather.
For further particulars, apply to Mr. ADAM EVANS, Stationer, Machynlleth, Montgomeryshire.

FOR SALE.—A FIRST-CLASS LEAD SETT. A shallow one.
There are two north and south lodes running through the sett. Only one has been wrought on, and over £400 worth of lead has been sold. The engine-shaft is not 15 feet deep.
To treat for the same, apply to W. PAYNTER, Jun., Wadebridge.

FOR SALE, separately, at reduced prices, the VALUABLE TOOLS and OTHER APPLIANCES used at New Dock Works, Leeds, in the manufacture of railway plant, wagon and carriage building, general engineering, &c., &c.
For prices and particulars, apply to Mr. JAMES POWELL, Consulting Engineer and Valuer of Engineering Plant, &c., 80, Basinghall-street, Leeds.

TO SELL, OR LET ON HIRE, for cash or deferred payments, FIFTY COAL WAGONS, hopper built, with bottom and side doors, carrying seven tons.
Apply to MANSTON COAL COMPANY, Leeds.

LEAD MINES IN THE COUNTIES OF DURHAM AND NORTHUMBERLAND.

TO BE LET, ON LEASE, the HUNSTANWORTH and NEWBIGGIN ROYALTIES, the former about 3534 acres, and the latter 200 acres, or thereabouts.
The Hunstanworth Royalty adjoins the celebrated W. B. Lead Mines, and has for many years yielded large quantities of lead ore, and much of the ground is undeveloped.

Incumbent lessees can have the plant and machinery, now upon the premises, at an annual rent, with a right to purchase at any time during the lease, on terms to be agreed upon.
For particulars, apply to JOSEPH DODDS, Esq., M.P., No. 4, Spring-gardens, Charing Cross, London, S.W., and Stockton-on-Tees; Mr. NATHANIEL CLARK, Beamish-park, Fence Houses; or Mr. THOMAS J. BEWICK, C.E., No. 2, Westminster-chambers, Victoria-street, London, S.W., and Haydon Bridge, Northumberland.

CHILTON MINES.

TO BE LET, the COAL MINES within and under the CHILTON ESTATE, the property of the Right Hon. the Earl of Eglon. The Estate is situated near FERRYHILL, in the County of DURHAM, and contains 1240 surface acres, or thereabouts. The North-Eastern main line, and West Hartlepool main line, and branch lines of railway intersect the estate.
For particulars, apply to JOHN JOHNSON, C.E., Chilton Hall, Ferry Hill.
Chilton Hall, Ferry Hill, July 4, 1871.

SOUTH WALES SMOKELESS STEAM COAL.

TO BE LET, ON LEASE, a COLLIERY, now working on the above, with a WORKABLE AREA of over FIVE HUNDRED AND NINETY ACRES. Railway through the property; eight miles from Port; coal on Government List.
For particulars, apply to Mr. LEXSON RHY, Mining Engineer, Aberdare, South Wales.

TO BE LET, ON LEASE, for a term of years, SEVERAL ACRES of LAND, suitable for MANUFACTURING PURPOSES, advantageously situated on the south bank of the River Tyne, about two miles below Newcastle-on-Tyne, and within a quarter of a mile from the North-Eastern Railway. There is a good quay frontage, with deep water.
Apply to Mr. T. S. BRAMWELL, King-street, Quay-side, Newcastle-on-Tyne.

SURPLUS MACHINERY ON SALE.

FOUR WHEEL TANK LOCOMOTIVE, worked 15 months; price £530; splendid STEEL BOILER, by Adamson, 16 ft. by 4 ft. 6 in., price £60; several HORIZONTAL ENGINES, nearly new, and a large quantity of similar and other machinery. ENGINEERS' TOOLS, &c., &c., good as new, and cheap.
C. REEVES, BANK STREET EXCHANGE, MANCHESTER.

FORGE, &c., MACHINERY FOR SALE.

ONE 18 in. by 3 ft. stroke independent high-pressure BEAM ENGINE, quite new.
Several sets 18 in. FORGE TRAINS, as worked.
FIFTY TONS of SPARE ROLLS, all sections and sizes.
TWO SETS 8 in. TRAINS and CONNECTIONS.
TWO CAMERON'S DONKEY PUMPS, 3 in. rams.
TWO 12 ft. 12 in. PATENT TURNABLES.
SEVERAL SETS BAR SHEARS, with and without engines.
ARMOUR PLATE PLANING MACHINE, new.
TWELVE TON NEW STEAM HAMMER, double wrought iron standard.
TWO 50 ton STEAM SWING CRANES, not quite finished.
TWO NEW EGG-ENDED BOILERS, 35 ft. by 6 ft., and fittings.
Several BEAM ENGINES, BOILERS, &c.
ALSO,
ONE 8-horse Thompson's patent ROAD STEAMER, with india-rubber tyres.
ONE ditto, 10-horse power, both very little used and equal to new,—cheap.
FOUR 6 ton WAGONS, suitable for ditto.
TWO 14 horse patent self-propelling PORTABLE ENGINES, with drums, &c., self contained, suitable for winding, hoisting, ploughing, &c.
TWO 12 horse ditto, with seven tired cultivator, 800 yards steel rope, porters.
TWO 6 horse PORTABLE ENGINES, in first-rate condition,—to be sold, cheap.
Apply to—
WHEATLEY KIRK and PRICE, 35, Princess-street, Manchester.

SECONDHAND MINING MACHINERY FOR SALE IN FIRST-RATE CONDITION.

PUMPING ENGINES, of various sizes,—viz., 80 in., 70 in., 60 in., 50 in., 40 in., 30 in.
WINDING ENGINES, STAMPING ENGINES, STEAM CAPSTANS, and CRUSHERS of various sizes.
A NUMBER OF BOILERS.
PITWORK of all descriptions, and all kinds of MATERIALS required for MINING PURPOSES.
TO BE SOLD, AT MODERATE PRICES.
The 80 in. is nearly new, and, with several of the other engines, can be guaranteed of superior make and modern design.

For further particulars, apply to—
MESSRS. HARVEY AND CO.,
ENGINEERS and GENERAL MERCHANTS,
HAYLE, CORNWALL,
AND HAYLE FOUNDRY WHARF, NINE ELMS, LONDON.
CITY OFFICES (GRESHAM HOUSE), 23½, OLD BROAD STREET, MANUFACTURERS OF
PUMPING and other LAND ENGINES and MARINE STEAM ENGINES of the largest kind in use, SUGAR MACHINERY, MILLWORK, MINING MACHINERY, and MACHINERY IN GENERAL.
SHIPBUILDERS IN WOOD AND IRON.

THE PATENT PNEUMATIC STAMPS

May be SEEN AT WORK at HAYLE FOUNDRY WHARF, NINE ELMS by previous application at either of the above addresses.

FOR SALE, a high-class 25-horse power PORTABLE STEAM ENGINE; also, a 16-horse power, with or without reversing gear.
FOR SALE, cheap, several first-class second-hand PORTABLE STEAM ENGINES, 3 to 14 horse power, in excellent order.
PIT WINDING GEAR made at a short notice suitable for portable engines.
FOR SALE, a first-class MORTAR MILL.
Apply to—
BARROWS and STEWART, ENGINEERS, BANBURY.

FOR SALE, BY PRIVATE CONTRACT, at PAR CONSOLS, Par Station, CORNWALL, and close to Par Shipping Harbour, ONE 80, and ONE 72 in. cylinder PUMPING ENGINE, and BOILER.
24, 18, and 15 in. WINDING ENGINES and BOILERS.
8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 in. PUMPS.
H and top-door pieces; plunger pots; rod plates; and a large quantity of other useful MINING MATERIALS.
Apply to Capt. PUCKEY, St. Blazey, Cornwall.

FOR SALE, BY PRIVATE CONTRACT:
ONE 30-inch cylinder ROTARY ENGINE, suitable for stamping and pumping.
ONE 36 inch cylinder PUMPING ENGINE.
ONE 10 ton and ONE 8 ton BOILER. All in good condition.
Apply to Messrs. JOHN HOOKING and SON, Engineers, Trowbridge-terrace, Redruth.

ON SALE, a 50 in. cylinder PUMPING ENGINE, in good working order; also, all the PITWORK, comprising three lifts, a 12 in. and a 14 in. column.
Apply to the BROUGHTON COAL COMPANY, near Wrexham.

ON SALE, ONE PAIR of 20 in. coupled WINDING ENGINES, almost new. Fitted with slot link motion, wrought-iron cranks, and crank shaft.
Also, ONE PAIR of 15 in. cylinder WINDING ENGINES, almost new, and fitted as above.
Apply, HENRY PARKINSON, 44, Folds-road, Bolton.

ON SALE, ONE 25-horse power double cylinder PORTABLE ENGINE, fitted with slot link motion for winding.
Also, 30-horse power double cylinder PORTABLE ENGINE.
ONE 20-horse power double cylinder PORTABLE ENGINE.
Will be sold cheap, and are in first-class order.
Apply, HENRY PARKINSON, 44, Folds-road, Bolton.

Now ready, 12mo., cloth limp, price 2s., postage 8d.

PHYSICAL GEOLOGY:

Partly based on Major-General Portlock's "Rudiments of Geology."
By RALPH TATE, A.L.S., F.G.S., &c.
Illustrated with 50 woodcuts. New volume (175) of Weale's Rudimentary Series.

Now ready, 12mo., volume of Text and 4to volume of Engravings, price 9s. 6d., cloth boards, postage 10d.

MANUAL OF MINING TOOLS:

Comprising their Materials and Manufacture, their Special Uses, Applications, Qualities, and Efficiency.
Illustrated by an Atlas of 255 engravings, drawn to scale.
By WILLIAM MORGANS, Lecturer at the Bristol School of Mines.
London: LOCKWOOD and Co., 7, Stationers' Hall-court, E.C.

Just published, 800 engravings, 4to., post free 2s. in stamps, weight 10 oz.,

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Containing Details and Prices of Goods in their five several Departments:—
(1) Brass Foundry, Steam Gauges, Indicators, Feeders, and Fittings; (2) Engineers' Sundries, Small Tools, and Stores; (3) Machine Pump and Fire Engine; (4) Turret Clock, &c.; (5) Electric Telegraph, A.B.C. Instruments, Bells, and Apparatus.
J. BAILEY and Co., Albion Works, Salford, Lancashire.

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In this department we beg to call attention to our Specialities for Mines:—
BAILEY'S DUST AND DAMP-PROOF SIGNAL BELL..... £3 10 0
Bailey's Dust and Damp-proof Pushes, and other important Apparatus, as daily at work in the chief collieries in this kingdom and abroad.

GENERAL MINING OFFICES,

BEDFORD FOUNDRY, TAVISTOCK,
CONDUCTED BY
MR. CHARLES F. COLLOM,
MINING ENGINEER, AGENT, AND SURVEYOR.
Who undertakes the entire local Management of Mines, including Dialecting, making accurate Underground Communications and Plans, and a stipulated salary.

Mines Inspected and faithfully Reported on, orders for which purpose should be made for Mr. Colloim, or his Agent.
Promoters of New Mining Enterprises (which will bear the strictest scrutiny) rendered every assistance.
Investments in Mines arranged for Capitalists,—the condition of the companies, as well as the prospects of the Mines, being first strictly investigated.

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ESTABLISHED 1859.
ANALYSES and REPORTS on METALLIC ORES, METALS, &c., daily attended to by Dr. T. L. PUTFORD, F.R.S., Member of the Chemical Society Paris, &c.

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3, CROWN COURT, THREADNEEDLE STREET, LONDON.
Selected List of Dividend and Progressive Mines, &c.; selected List of Foreign Bonds and Colonial Bonds, &c.; selected List of Home Securities, Banks, Railways, and Miscellaneous, &c.

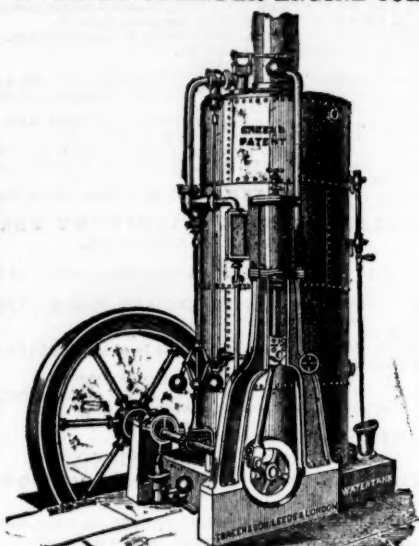
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Foreign, Colonial Bonds, Railway Stocks and Shares, Banks, Insurance, and Miscellaneous Stocks and Shares bought and sold at the market prices subject to a profit of 1 per cent. on the price of the day.—Aug. 25, 1871.

MR. W. WHITE, ASSAYER AND CONSULTING CHEMIST.

In announcing the REMOVAL of his LABORATORY and ASSAY OFFICE from Crown-court to much more commodious premises, 25, FINCH-BURY PLACE, near FINSTURY CIRCUS, hopes to RETAIN the CONFIDENCE hitherto reposed in him.
Assaying taught. Lectures to Schools and Public Institutions.

GREEN'S PATENT BOILERS, WITH INVERTED CYLINDER ENGINE COMBINED

Specialty adapted for Contractors, Joiners, and Builders,
Cabinet-makers, Brick-makers, Farmers, Mills, Dye-
houses, Workshops, Printing-offices, &c.



For Exportation they are invaluable, being sent out in
complete working order, ready for
immediate use.

The above Engines and Boilers are constructed in an exceedingly substantial and simple manner, every part being easy of access, consequently can be readily understood and managed; they are fitted with governors, equilibrium throttle valve, stop valve, safety valve, feed pump, water and steam gauges complete. The foundation plate answers the purpose of feed water tank, in which the water is heated before passing into the boiler, and also of an ash-pit, and no brickwork or foundation is required.

N.B.—Upwards of 600 of these Engines and Boilers are now at work, giving entire satisfaction.

Illustrated PRICE LISTS free on application to

THOMAS GREEN AND SON,
SMITHFIELD IRONWORKS, LEEDS;
And 54 and 55, Blackfriars-road, London, S.E.

STEEL! STEEL! STEEL!

TO MINE PROPRIETORS, CONTRACTORS, ENGINEERS,
AND OTHERS.

JOHN TURNER'S
CELEBRATED DOUBLE-REFINED CAST-STEEL
FOR JUMPERS AND DRILLS USED FOR HARD ROCK AND MINES.
Best quality at the lowest manufacturer's price. Delivered free.

J. TURNER, SHEFFIELD.
GENERAL DEPOT, AND STOCK OF ALL SIZES AT
FERRY ROAD, MIDDLESBOROUGH-ON-TEES.

References given to Cumberland, Cornwall, Scotland, and Cleveland Mines.

BY  LETTERS
ROYAL PATENT.
MALAM AND COMPANY,

ENGINEERS,
INVENTORS AND PATENTEES OF PORTABLE AND STA-
TIONARY GAS APPARATUS,
NEW ROAD, ROTHERHITHE,
LONDON.

CONTRACTORS for GAS, WATER, SUGAR WORKS, and DISTILLERIES
on the most improved principles.

Plans and specifications furnished on application.

Also, INVENTORS of APPARATUS for GENERATING GAS from DEAD
and other OILS, applicable to every description of FURNACES, FLUES, &c.

IMPROVED APPLICATION OF WATER POWER. THE TURBINE.

Mac Adam, Brothers, & Co.

ENGINEERS,
SOHO FOUNDRY, BELFAST,

After twenty years of experience, have brought their
Improved TURBINE to great perfection.

It is applicable to all practicable heights of fall, giving much
greater power from the water than any other kind of water-
wheel.

On low falls it has the great advantage of not being impeded
by floods or back-water.

It is particularly well adapted for situations where the
quantity of water is variable, and where all other wheels fail.
Its motion is extremely regular, and, when desired, a
Governor can be applied effectively.

This Wheel is at work in a great many places, to which
reference will be given.

W. GÜNTHER,
CENTRAL ENGINEERING WORKS OLDHAM,

MANUFACTURER OF MOST IMPROVED

Silent Fans for blowing and exhaust-
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Direct-acting Steam Fans.

Centrifugal Pumps and Pumping En-
gines.

Turbine Water Wheels, for high and
low falls, and variable quantities of
water.

Cast-iron Smiths' Hearths.

General Engineering Work.

ILLUSTRATED PRICE LISTS AND REFER-
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(ESTABLISHED 1770.)

MANUFACTURERS OF EVERY DESCRIPTION OF

IMPROVED

PATENT FLAT AND ROUND WIRE ROPES

From the very best quality of charcoal iron and steel wire.

PATENT FLAT AND ROUND HEMP ROPES.

SHIPS' RIGGING SIGNAL AND FENCING STRAND, LIGHTNING CON-
DUCTORS STEAM PLOUGH ROPES (made from water and horsefall's
patent steel wire), HEMP FLAX ENGINE, ARN, COTTON WASTE,
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UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.

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AWARDED TWENTY GOLD AND SILVER FIRST-CLASS PRIZE MEDALS.

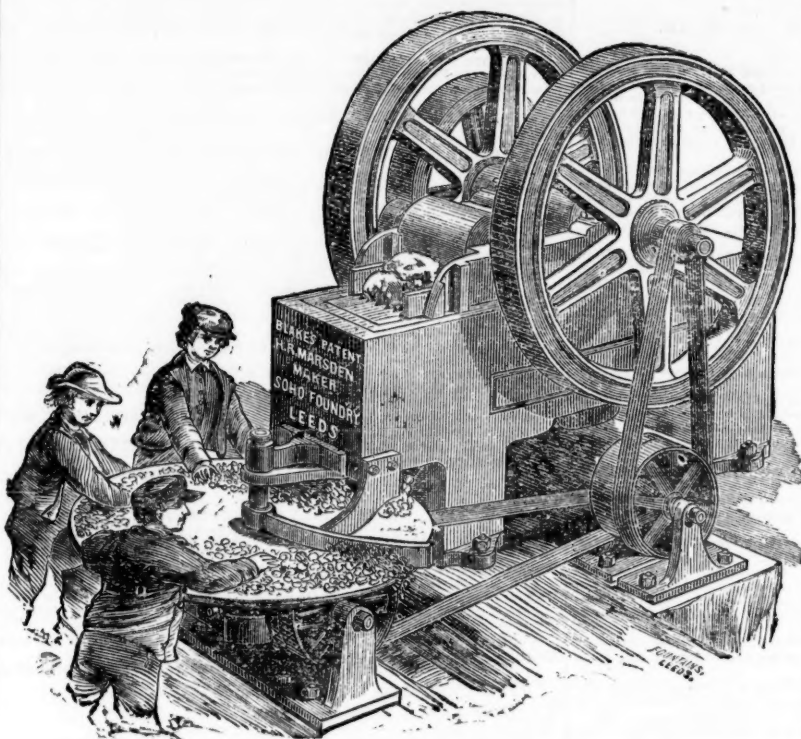
IMMENSE SAVING OF LABOUR.
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT
GRINDERS, MACADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER, OR ORE-CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

This is the only machine that has proved a success. This machine was shown in full operation at the Royal Agricultural Society's Show at Manchester,
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AWARDED TWO FIRST-CLASS SILVER MEDALS. It has also just received SPECIAL GOLD MEDAL at Santiago, Chili.

It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Bra-
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**The Parys Mines Company, Parys Mines, near
Bangor, June 6.**—We have had one of your stone
breakers in use during the last 12 months, and
Capt. Morcom reports most favourably as to its
capabilities of crushing the materials to the re-
quired size, and its great economy in doing away
with manual labour.

For the Parys Mining Company,
H. R. Marsden, Esq. JAMES WILLIAMS.

Ecotom Emery Works, Manchester.—We have
used Blake's patent stone breaker made by you,
for the last 12 months, crushing emery, &c., and
it has given every satisfaction. Some time after
starting the machine a piece of the moveable jaw
about 20 lbs. weight, chilled cast-iron, broke off,
and was crushed in the jaws of the machine to
the size fixed for crushing the emery.

**THOS. GOLDSWORTHY & SONS,
H. R. Marsden, Esq.**

Alkali Works, near Walsbury.—I at first
thought the outlay too much for so simple an
article, but now think it money well spent.

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stone breaker does its work admirably, crushing
the hardest stones and quartz. **WM. DANIEL.**

Our 15 by 7 in. machine has broken 4 tons of
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terial, free from dust.

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Kirkless Hall, near Wigan.—Each of my ma-
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or ore per day (10 hours), at a saving of 40, per
ton. **JOHN LANCASTER.**

Oveca, Ireland.—My crusher does its work most
satisfactorily. It will break 10 tons of the hard-
est copper ore stone per hour. **WM. G. ROBERTS.**

General Frémont's Mines, California.—The 11
by 7 in. machine effects a saving of the labour of
about 30 men, or \$75 per day. The high estima-
tion in which we hold your invention is shown by
the fact that Mr. Park has just ordered a third
machine for this estate. **SILAS WILLIAMS.**

Your stone breaker gives us great satisfaction.
We have broken 101 tons of Spanish pyrites with
it in seven hours. **EDWARD AARON.**
H. R. Marsden, Esq. Weston, near Bangor.

For illustrated catalogue, circulars, and testimonials, apply to—

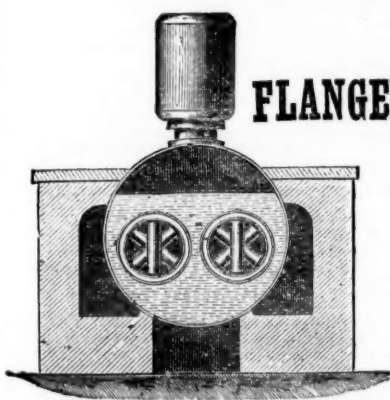
H. R. MARSDEN, SOHO FOUNDRY,

MEADOW LANE, LEEDS,
ONLY MAKER IN THE UNITED KINGDOM.

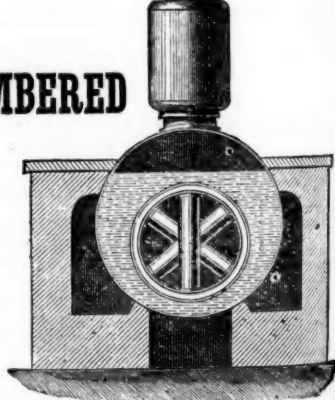
HAWKSLEY, WILD, AND CO.'S

PATENT
FLANGED & COMBUSTION-CHAMBERED

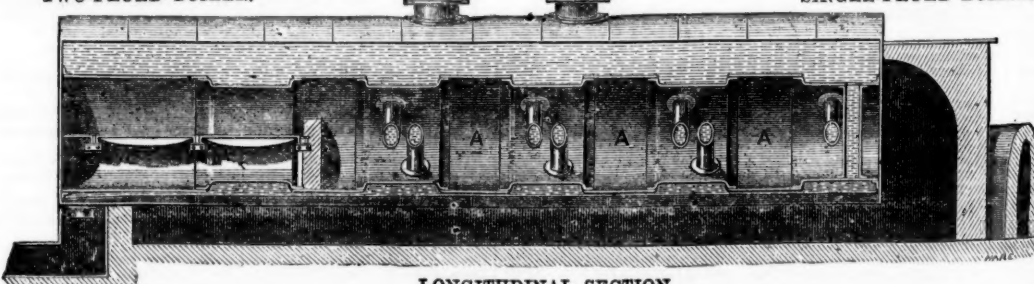
FLUED
BOILERS.



TWO-FLUED BOILER.



SINGLE-FLUED BOILER.



LONGITUDINAL SECTION.

THE FLUES OF THE ABOVE BOILERS ARE MADE OF TWO DIAMETERS, ONE RING OF PLATES BEING
4 inches less than the other, alternately.
The smaller rings being flanged, as shown in drawing, are thereby considerably strengthened, besides securing the most material point—a perfect
EXPANSION-JOINT.
The cross tubes are placed in the smaller rings of the flue, so that any one can easily be taken out and replaced.
The larger rings of the flue act as reverberating, combustion, and heat-retaining chambers, greatly economising the fuel.
These Boilers are strong, durable, and economical, and have been at work a number of years with the most satisfactory results.

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SAVILLE STREET EAST, SHEFFIELD.

CHAS. PRICE AND CO.'S RANGOON ENGINE OIL, AS SUPPLIED TO H.M. DOCKYARDS AND FLEET.

THIS OIL is suitable to every kind of Machinery. As a lubricant it is equal to the best Spermaceti
Lard Oil, while it possesses the great advantage of being entirely free from any principle which will
corrode the metal bearings.

For particular kinds of Machinery, the Oil may be specially prepared of a consistency and character
adapted to the nature of the work to be done.

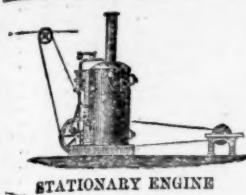
"Chemical Laboratory, 7, Printing House-square, Blackfriars, April, 1869.
"I herewith certify that the Rangoon Engine Oil, manufactured by Messrs. Chas. Price and Co., is
free from any material which can produce corrosion of the metal work of machinery. It is in-
calculated to protect metallic surfaces from oxidation.

"The lubricating power of this oil is equal to Spermaceti or Lard Oil.

"T. W. KEATES, F.C.S., &c. &c.

Every parcel of the Oil sent from the work bears the Trade Mark of the Firm.

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CHAPLIN'S PATENT STEAM ENGINES & BOILERS

(PRIZE MEDAL, INTERNATIONAL EXHIBITION, 1862),

The ORIGINAL combined Vertical Engines and Boilers, introduced by Mr. CHAPLIN in 1855. Each class kept in Stock for Sale or Hire.

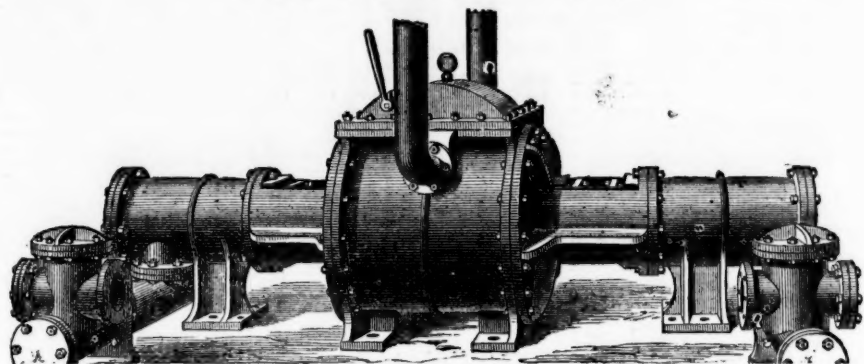
WIMSHURST & CO., ENGINEERS,

OFFICES: 117, CANNON STREET, E.C. WORKS: REGENT'S PLACE, COMMERCIAL ROAD EAST, LONDON, E.



STEAM CRANE.

HAYWARD TYLER AND CO.'S PATENT STEAM PUMPING MACHINERY FOR DEEP MINES.



The Machine erected in South Wales (at the Broad Oak Colliery, Loughor, near Llanelli), has a steam cylinder 40 inches diameter and two plungers of 8 inches diameter, and is raising 15,000 gallons of water per hour, the steam-boiler being on the surface. This it does with the greatest ease, the pump-valves working with scarcely any perceptible sound. The length of the incline besides the vertical lift is at present about 250 yards. The pump is constructed to be moved down the working as it advances, and is calculated to force the water to a height of 700 feet through a horizontal distance of 490 yards. For full description see *Mining Journal*, *Colliery Guardian*, *Engineering*, &c.

Sole Makers, HAYWARD TYLER & Co., Hydraulic Engineers,
84 and 85, UPPER WHITECROSS STREET, LONDON, E.C.

TITANIC STEEL AND IRON COMPANY LIMITED

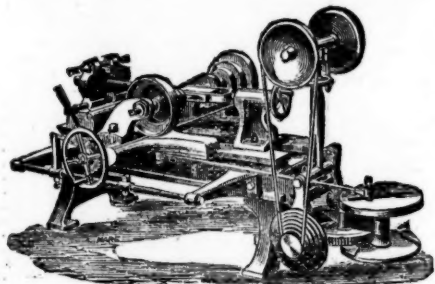
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MUSHET'S TITANIC BORER STEEL,

Mushet's Titanic Cast Steel for Engineer's Tools, &c.

FOREST STEEL WORKS, COLEFORD,
GLOUCESTERSHIRE.

Patent Duplex Cotter-Hole and Key-Bed DRILLING MACHINE.

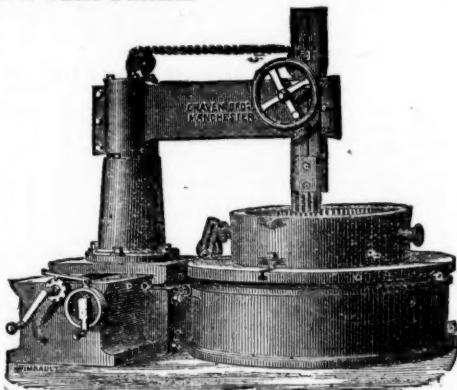


The advantage of this Machine is, that the Drills are only requisite to be half the length of the Cotter-hole required to be cut, as they operate simultaneously from both sides of the object, meeting accurately in the middle, and doing the work in less than half the usual time, besides producing a smooth hole on account of short, stiff Drills being used, thus producing a much better class of work, hitherto unattainable by the Machines with one long Drill.

The Machine is made in three sizes, and often made with double set of Head Stocks, to drill both ends of a connecting rod at the same time.

Improved WHEEL-MOULDING MACHINE.

This Machine will Mould the Teeth of Bevel, Spur, and Worm Wheels, also Straight Racks, of any Pitch with a whole Pattern.



Some of the many advantages in the use of this Machine are, that the 100th of Wheels are perfectly straight across the Tooth, no tapes being required to draw the pattern; the Wheels are true in diameter, not depending upon a wood model, which sometimes alters in shape; Wheels of any pitch and form of teeth can be moulded without the use of a whole expensive pattern; and wheels to work into each other can be made mathematically correct in form, at the small cost of segment patterns.

The Machine is made in various sizes to mould wheels of any diameter.

Craven Brothers,
MAKERS OF EVERY DESCRIPTION OF MACHINE TOOLS,
Vauxhall Ironworks, Osborne Street, Manchester.

PATENT SELF-LUBRICATIVE STEAM & HYDRAULIC ENGINE PACKING.

This Packing is invaluable to all Users of Steam-Power; it supercedes anything of the kind ever invented; it is now in use in all the Chief Railways and First Firms in this Country and Abroad, and is

THE ONLY PACKING THAT WORKS WITHOUT OIL OR GREASE,

Does not char, is pliable, keeps the rods

COOL, BRIGHT, AND CLEAN,

And lasts longer than any other, thereby

SAVING FULLY 200 PER CENT.

To the User, in oil, labour, and material.

Can be had only from the Agents throughout the country, appointed by

THE SOLE LICENSEES,

HENRY HOUSE AND CO.,

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Where also may be obtained, the LUBRICATIVE PACKING COMPANY'S

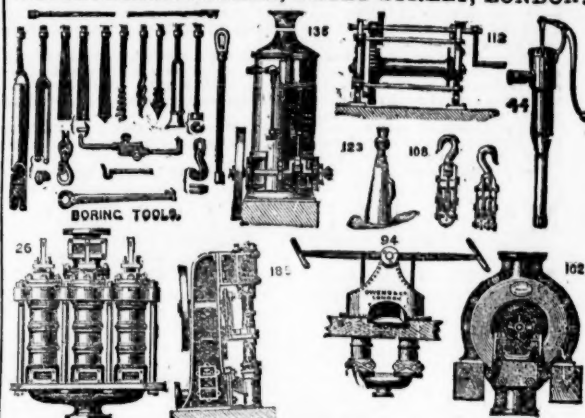
ANTI-FRICTION CREAM OIL,

Which Lubricates perfectly, keeps the Bearings Cool, and does not become Viscid or Glutinous.

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Hydraulic and General Engineers,

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ALSO EVERY OTHER DESCRIPTION OF
HYDRAULIC AND GENERAL MACHINERY,

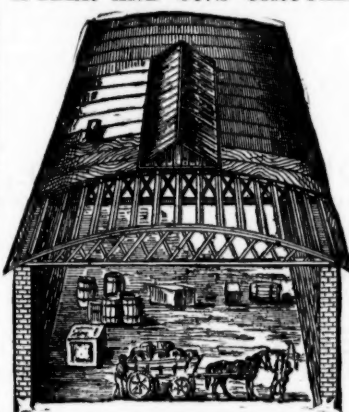
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TURBINES, WATER WHEELS, WIND ENGINES,
THE HYDRAULIC RAM, FIRE ENGINES, &c.
Catalogues and Estimates on application.

M'TEAR AND CO.'S CIRCULAR FELT ROOFING

FOR
GREAT ECONOMY
AND
CLEAR WIDE SPACE.

For particulars, estimates,
and plans, address,—

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CORPORATION STREET,
BELFAST.



The above drawing shows the construction of this cheap and handsome roof now much used for covering factories, stores, sheds, farm buildings, &c., the principals of which are double bow and string girders of best pine timber, sheathed with 1/2 in. boards, supported on the girders by pulleys running longitudinally, the whole being covered with patent waterproof roofing felt. These roofs so combine lightness with strength that they can be constructed up to 100 ft. span without centre supports, thus not only affording a clear wide space, but effecting a great saving both in the cost of roof and uprights.

They can be made with or without top-lights, ventilators, &c. Felt roofs of any description executed in accordance with plans. Prices for plain roofs from 30s. to 60s. per square, according to span, size, and situation.

Manufacturers of PATENT FELTED SHEATHING, for covering ships' bottoms under copper or zinc.

INODOROUS FELT for lining damp walls and under floor cloths.

DRY HAIR FELT, for deadening sound and for covering steam pipes, thereby saving 25 per cent. in fuel by preventing the radiation of heat.

PATENT ASPHALT ROOFING FELT, price 1d. per square foot.

Wholesale buyers and exporters allowed liberal discounts.

PATENT ROOFING VARNISH, in boxes from 3 gallons to any quantity required, 8d. per gallon.



By a special method of preparation, this leather is made solid, perfectly close in texture, and impermeable to water; it has, therefore, all the qualifications essential for pump buckets, and is the most durable material of which they can be made. It may be had of all dealers in leather, and of

I. AND T. HEPBURN AND SONS,
TANNERS AND CURRIERS, LEATHER MILLBAND AND ROSE PIPE MANUFACTURERS,

LONG LANE, SOUTHWARK, LONDON.

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The IRON AND COAL TRADES' REVIEW is extensively circulated amongst the Iron Producers, Manufacturers, and Consumers, Coalowners, &c., in all the iron and coal districts. It is, therefore, one of the leading organs for advertising every description of Iron Manufactures, Machinery, New Inventions, and all matters relating to the Iron, Coal, Hardware, Engineering, and Metal Trades in general.

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The great success which is attending the opening and working of the Mines in the counties of Cardigan and Montgomery, and the many properties placed at the disposal of Capt. ABSALOM FRANCIS, induces him to offer his services, either to ADVISE, INSPECT, REPORT, or SURVEY, for Mining Companies or private shareholders.

For terms, apply to Capt. ABSALOM FRANCIS, as above.

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BICKFORD, SMITH AND CO., OF TUCKINGMILL, CORNWALL, MANUFACTURERS OF PATENT SAFETY FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—EVERY COIL OF FUSE MANUFACTURED BY THEM HAS TWO SEPARATE THREADS PASSING THROUGH THE COLUMN OF GUNPOWDER, and BICKFORD, SMITH AND CO. CLAIM SUCH TWO SEPARATE THREADS AS THEIR TRADE MARK.

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£100	Blackburn Iron and Steel Co. [L.]	70 0 0	29	pm.			
£100	Bolckow, Vaughan, and Co. [L.]	70 0 0	8 1/2	pm.			
£100	Brown, John, and Co. [L.]	70 0 0	8 1/2	pm.			
£100	Consett Iron Co. [L.]	70 0 0	6 1/2	pm.			
£100	Cammell and Co. [L.]	80 0 0	10	dis.			
£100	Ebbw Vale Co. [L.]	27 10 0	5	dis.			
£100	Fairbairn Engineering	5 0 0	1	pm.			
£100	General Mining Association [L.]	20 0 0	8 1/2	dis.			
£100	Hopkins, Gilkes, and Co. [L.]	10 0 0	1/2	dis.			
£100	Ironmaster's Company [L.]	10 0 0	1/2	dis.			
£100	Midland Iron Co. [L.]	5 0 0	6 7 1/2	pm.			
£100	Mersey Steel and Iron Co. [L.]	11 10 0	7 3/4	dis.			
£100	Mwyndy Iron Ore [L.]	3 10 0	2 1/2	dis.			
£100	Nantyllo and Blaenau (perp. s. p. c. pref.)	25 0 0	1 1/2	dis.			
£100	Nerludda Coal and Iron	0 7 0	1	pm.			
£100	Palmer's Shipbuilding and Iron Co. [L.]	25 0 0	1	pm.			
£100	Partridge Iron Co. [L.]	25 0 0	1	pm.			
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£100	Rhymney Iron Co. [L.]	10 0 0	17 1/2	dis.			
£100	Shotts Iron Co.	50 0 0	40	dis.			
£100	Sheepbridge Iron and Coal Co. [L.]	25 0 0	4 1/2	dis.			
£100	S. Avey Iron and Coal Co.	60 0 0	40	dis.			
£100	Thames Iron Company	10 0 0	8	pm.			
£100	Titanic Iron and Steel	5 0 0	9 11	pm.			
£100	Vancover Coal [L.]	10 0 0	par.	1 pm.			
£100	Whitbaker Iron Mines [L.]	4 0 0	—	—			
£100	Wilson Coal and Iron Co.	100 0 0	12 10	dis.			
£100	Widit ditto	75 0 0	12 10	dis.			

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Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid
1000	Alderley Edge, c. Cheshire	10 0 0	—	—	10 11 8	0 5 0	July 1871
20000	Blissen Caetan, s. t. Cardig.	1 0 0	1 1/4	1 1/4	0 10 0	0 10 0	May 1871
200	Boscawell, t. c. St. Just	1 0 0	—	—	0 2 0	0 2 0	Apr. 1870
200	Botalack, t. c. St. Just	21 0 0	250	250 260	60 5 0	6 0 0	Aug. 1871
5000	Broonfloyd, s. t. Cardigan	100 0 0	110	105	106 0 0	2 0 0	July 1871
4000	Brookwood, c. Buckfastleigh	1 16 0	—	—	1 0 0	0 2 6	July 1871
5094	Bwch Consols, s. t. Cardigan	4 0 0	—	—	0 9 0	0 2 0	May 1871
6400	Cashwell, t. Cumberland	2 10 0	—	—	0 18 0	0 3 6	Sept. 1871
5000	Castle-an-Dinas, t. St. Columb.	2 0 0	—	—	0 2 0	0 2 0	July 1871
858	Cargill, s. t. Newlyn	16 5 7	—	—	16 15 0	0 10 0	Aug. 1869
1000	Carn Brea, c. t. Illogan	35 0 0	145	140 143	282 10 0	2 0 0	Aug. 1871
2450	Cook's Kitchen, c. Illogan	19 14 9	28	30 32	6 17 0	0 13 0	July 1871
867	Cwm Erwin, t. Cardigan	7 10 0	—	—	31 13 0	0 5 0	Jan. 1871
128	Cwmystwith, t. Cardigan	300 0 0	—	—	394 10 0	2 0 0	July 1869
280	Darwent Mines, s. t. Durham	300 0 0	—	—	177 0 0	2 0 0	July 1868
1024	Darwen St. Consols, c. Tavistock	1 0 0	100	95 100	1153 0 0	4 0 0	July 1871
656	Ding Dong, t. Gwilt	49 14 6	—	—	7 10 0	0 15 0	Aug. 1870
1432	Dolcoath, c. t. Camborne	32 4 6	185	180 185	260 12 6	3 0 0	Aug. 1870
12800	Drake Wallis, t. Calstock	2 10 0	—	—	1 3 3	0 1 0	July 1870
6144	East Cardon, c. St. Cleer	2 14 6	1 1/4	4 1/2	14 14 0	0 3 6	July 1871
300	East Darren, t. Cardigan	32 0 0	—	—	197 10 0	2 0 0	Apr. 1871
6400	East Pool, t. c. Pool, Illogan	0 9 0	13 1/4	13 13 1/4	11 16 3	0 5 0	July 1871
1906	East Wheel Lovell, t. Wendron	3 9 0	13	11 13	19 8 6	0 12 6	Aug. 1871
2800	Fordale, t. Isle of Man	25 0 0	—	—	75 10 0	0 10 0	June 1871
2800	Frank Mills, t. Chertow	2 10 0	—	—	4 3 6	0 2 6	Aug. 1870
3500	Gawton, c. Tavistock	3 10 6	—	—	0 3 0	0 3 0	Aug. 1870
15000	Great Northern, t. Isle of Man	4 0 0	17	16 1/2 17 1/2	14 3 0	0 6 0	June 1871
3000	Great Northern Manganese	5 0 0	—	—	5 p. et.	—	Feb. 1869
8908	Great Wheel Vor, t. c. Helston	40 0 0	10	9 1/2 10	15 12 0	0 3 6	June 1871
10240	Gunnelside (Clitters), t. c. Helston	4 19 0	—	—	0 2 0	0 1 0	Nov. 1870
1024	Herodafot, t. near Liskeard	8 10 0	45	42 44	57 0 0	1 10 0	June 1871
25000	Killaloe, s. t. Tipperary	1 0 0	1 1/4	1 1/4	0 2 11 1/2	0 9 1/2	Dec. 1870
165	Levant, c. t. St. Just	10 8 1	—	—	1101 0 0	2 0 0	Aug. 1869
400	Lisburne, t. Cardigan	18 15 0	—	—	543 10 0	2 0 0	Mar. 1871
5000	Marke Valley, c. Cardon	4 10 0	5 1/2	5 1/2 6	7 2 0	0 4 0	July 1871
1800	Miner Mining Co. [L.]	7 0 0	6 1/2	6 1/2 6	298 13 6	4 15 0	Aug. 1870
20000	Miner Co. of Ireland, c. t. c.	7 0 0	6 1/2	6 1/2 6	0 18 0	0 2 1 1/2	July 1870
4000	New Brook, t. c. Par St. Cl.	5 0 0	—	—	0 7 6	0 2 6	Mar. 1871
2000	North Levant, t. c. St. Just	10 12 0	15	14 15	3 5 0	0 15 0	Aug. 1871
5610	North Wheel Croft, c. Illogan	3 11 3	2	1 1/2 2 1/4	0 5 6	0 1 6	June 1871
256	Pendarves United, t. c. Camb.	86 0 0	52	50 52 1/2	21 0 0	0 3 0	July 1871
5000	Penhalls, t. St. Agnes	3 0 0	6	5 1/2	1 19 6	0 3 0	Aug. 1871
500	Phoenix, t. c. Llaninhorne	50 0 0	—	—	470 10 0	7 0 0	June 1871
1772	Polyherro, t. St. Agnes	15 0 0	—	—	0 17 6	0 10 0	May 1871
2000	Polidice, t. c. Gwennap	10 0 0	—	—	1 10 0	0 10 0	Oct. 1870
12800	Prince of Wales, c. Calstock	0 12 4	27	24 26	102 0 0	1 0 0	Nov. 1871
1120	Provident, c. t. Uney Lelant	0 10 0	—	—	1 6 0	0 1 0	Dec. 1870
5000	Queen, s. t. Calstock	4 0 0	1 1/4	1 1/4	0 14 6	0 1 6	June 1871
5869	Rosewall Hill & Ransom	4 0 0	—	—	0 14 6	0 1 6	June 1871
512	South Cardon, c. St. Cleer	1 5 0	21 1/2	185 190	668 10 0	3 0 0	July 1871
6123	South Condarrow, t. c. Camborne	5 5 6	9 1/4	9 1/4 9 1/4	0 7 6	0 2 6	June 1871
6000	South Darren, t. Cardigan	3 6 6	—	—	1 6 6	0 1 6	Nov. 1870
937	South Wh. Croft, c. Illogan	24 10 10	22	21 23	3 0 0	0 10 0	June 1871
496	So. Wh. Frances, c. Illog.	18 18 9	51	50 51	371 18 6	1 0 0	Mar. 1869
242	Spearn Moor, t. St. Just	36 17 9	—	—	16 15 0	1 0 0	June 1871
940	St. Ives Consols, t. St. Ives	10 15 0	7	6 1/2 6 1/4	0 10 0	0 10 0	May 1869
8771	St. Just Amalgamated, t. c.	2 10 0	17 1/2	16 16 1/2	1 6 0	0 2 6	Nov. 1871
12000	Tankerville, t. Salop	9 0 0	47	48 50	32 13 6	0 6 0	Aug. 1871
6000	Tinacraft, c. Pool, Illogan	6 0 0	—	—	7 10 0	0 10 0	Sept. 1871
4000	Trumpet Cons., t. Helston	5 15 3	17	16 18	80 7 6	0 12 6	Apr. 1871
15000	Van, t. Llanidloes	4 5 0	67 1/2	66 68	4 14 0	0 12 0	June 1871
3000	W. Chiverton, t. Ferrazabulo	10 0 0	17	18 19	50 7 6	0 10 0	June 1871
612	West Wheel Frances, t. Illogan	107 15 0	67 1/2	65 70	6 10 0	0 10 0	Apr. 1871
400	W. Wheel Seton, c. Camborne	10 0 0	135	180 140	679 0 0	2 10 0	Aug. 1871
12288	Wheel Arthur, t. Calstock	1 0 0	—	—	0 2 0	0 1 0	Aug. 1868
512	Wheel Basset, c. Illogan	8 2 6	67 1/2	60 65	639 10 0	1 0 0	June 1868
512	Wheel Killy, s. t. Kea	10 15 0	10	9 1/2 10	58 10 0	1 10 0	Nov. 1870
4295	Wheel Killy, t. St. Agnes	8 4 6	10	7 1/2 8 1/4	13 12 6	0 10 0	Aug. 1871
1024	Wheel Killy, t. Uney Lelant	2 6 10	10	7 1/2 8 1/4	80 7 6	0 12 6	Apr. 1871
1224	Wheel Mary Ann, t. Uney Lelant	18 17 6	17	16 16 1/2	72 17 6	0 10 0	June 1871
1000	Wh. Mary Hutches, t. Plimp.	2 12 6	—	—	0 17 6	0 7 6	Sept. 1871
80	Wheel Owties, t. St. Just	70 0 0	—	—	493 0 0	8 0 0	Aug. 1871
12000	Wheel Russell, c. Tavistock	1 0 0	—	—	0 2 0	0 1 0	June 1871
396	Wheel Seton, t. c. Camborne	61 0 0	32 1/2	28 30	254 15 0	2 0 0	Feb. 1869
4096	Wheel Uney, t. c. Redruth	10 14 6	8	7 1/2 8	0 11 0	0 6 0	July 1871
71000	Wicklow, c. t. Wicklow	2 10 0	7	7 1/2	50 2 6	0 2 6	Sept. 1871